



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

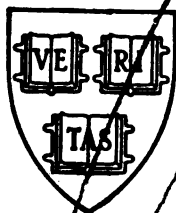
We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

**HARVARD COLLEGE
LIBRARY**



**GIFT OF THE
GOVERNMENT
OF THE UNITED STATES**



Per
wv
741
.A32
11-28
1915-1917

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

INFANT MORTALITY

MONTCLAIR, N. J.

A STUDY OF INFANT MORTALITY
IN A SUBURBAN COMMUNITY



INFANT MORTALITY SERIES No. 4

Bureau Publication No. 11



HARVARD UNIVERSITY
GRADUATE SCHOOL OF EDUCATION
MONROE C. GUTMAN LIBRARY

WASHINGTON
GOVERNMENT PRINTING OFFICE
1915



U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU
JULIA C. LATHROP, CHM

INFANT MORTALITY

MONTCLAIR, N. J.

A STUDY OF INFANT MORTALITY
IN A SUBURBAN COMMUNITY

INFANT MORTALITY SERIES No. 4
Bureau Publication No. 11



WASHINGTON
GOVERNMENT PRINTING OFFICE
1913



LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, March 8, 1915.

SIR: I transmit herewith a study of infant mortality in the town of Montclair, N. J.

In this study the Children's Bureau cooperated with the health authorities of Montclair. The schedules were furnished by the Children's Bureau and the data were collected by nurses of the town health department under the direction of Mr. C. H. Wells, health officer. Miss Sophia A. Vogt, of the Children's Bureau, visited Montclair and started the inquiry. The material was tabulated in the bureau and the text written by Miss Margaretta A. Williamson, of the bureau staff.

This description of the life of babies in Montclair during one calendar year is of interest because it shows the facts regarding a particularly favored suburban community in charge of a notably efficient health officer. It is seen that the general infant death rate of Montclair was 84.6 as against an estimated rate of 124 for the birth-registration area of the United States for 1910. A reading of the report shows the variations above and below the average rate in the different localities of the town and their accompanying characteristic factors.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

Hon. WILLIAM B. WILSON,
Secretary of Labor.



INFANT MORTALITY: MONTCLAIR, N. J.

INTRODUCTION.

The Montclair Board of Health in 1913 determined to conduct an inquiry into infant mortality in Montclair, basing its inquiry upon all the births which occurred in the town during the calendar year 1912 and proceeding according to the plan adopted by the Federal Children's Bureau for its series of infant mortality studies. Schedule forms, such as had been used by the Children's Bureau in its field study in Johnstown, Pa., were furnished to the board of health, and a field agent of the bureau was sent to Montclair to explain to the local investigators the schedule questions and the bureau's methods of collecting statistical information. Two Montclair nurses visited the homes of the babies, interviewed the mothers, and filled out for each baby a schedule covering the first year of its life or as much of the first year as it survived. The fourth-ward mothers were visited by the board of health nurse. The other nurse was engaged to make the investigations in the rest of the town. Believing that a report of the results of this inquiry into infant mortality in a suburban community would be of interest, the scheduled information has been tabulated by the Children's Bureau.

In the report have been included a brief description of the town, an analysis of infant mortality in Montclair in 1912, and a discussion of the various social and civic factors which in Montclair seem to have been closely related to the problem of infant mortality.

The chief sources of information were as follows: Interviews with the Montclair mothers, who by their interest and cooperation made the inquiry possible; interviews with public officials and with doctors, nurses, and others who had been closely connected with infant-welfare work; annual reports of the town departments, particularly the full and detailed reports of the board of health; reports of social and charitable agencies; and personal observation of conditions.

In view of the decision to include in this inquiry all babies born in Montclair in 1912, and to study the conditions surrounding them during their first year of life, the birth certificates were copied from the records of the health officer for all babies born in that year, and a 12-months' lapse of time from the date of birth was allowed in each

case before the baby was visited; i. e., a baby born in November, 1912, was not visited until after November, 1913, in order that the first 12 months of life might have been completed. Births (numbering 53) to nonresident parents at the Mountainside Hospital and stillbirths (20) were excluded from the study.¹

The mothers of the babies, located from the addresses on the birth certificates, were interviewed and questioned as to the care and home environment of the babies during the first year. The investigation was entirely democratic. All mothers who could be found, whether rich or poor, native or foreign, were visited. Notwithstanding the personal nature of the schedule questions only 8 mothers refused to give the information. From the 518 birth certificates, complete schedules relating to 402 babies were secured and are included in the statistics of this report. Information relating to 116 births could not be obtained for the following reasons: Seventy-three mothers had moved away from Montclair; 20 could not be located; 8 refused to give the information; 1 mother had died; 3 were ill; 1 baby was found to have been born outside of Montclair; 6 mothers were not visited; and in 4 cases the information was not used because it had not been obtained from the mother.

The infant mortality rate in this study is obtained by comparing the number of babies born alive in Montclair in 1912 and included in this study with the number of these same babies who died before they were a year old. The number of such deaths per 1,000 live births gives an exact infant mortality rate for the limited group considered. This method, which has been worked out for the infant mortality series of the Children's Bureau, differs from the usual method of computing the infant mortality rate. The usual method is to compare the live births in a given area during a single calendar year with the deaths under 1 year occurring during the same year, regardless of the possibility that some of the babies who died during the year may have been born in a different area and that not all who die under 12 months of age die in the calendar year of their birth.

¹ The following summary of the number of stillbirths and the number per hundred live births from 1908 to 1912 has been prepared from the Annual Report of the Board of Health for 1912:

Year.	The town.		Colored.		Italian.		Other white.	
	Number.	Per hundred live births.	Number.	Per hundred live births.	Number.	Per hundred live births.	Number.	Per hundred live births.
1908.....	20	4.7	5	7.6	2	2.3	13	4.8
1909.....	24	5.6	7	12.1	4	5.8	13	4.4
1910.....	20	4.7	5	8.6	3	2.8	12	4.7
1911.....	15	3.2	4	6.4	5	5.1	6	2
1912.....	20	3.9	4	4.9	6	4.5	10	3.3

GENERAL CHARACTERISTICS OF MONTCLAIR.

Location.—Montclair lies 13 miles to the northwest of New York City, in Essex County, N. J., and is served by the Erie and the Delaware, Lackawanna & Western Railroads and by an interurban trolley. Located in a well-wooded, country-like section of New Jersey, it occupies a long rectangular area comprising 6.1 square miles and extending along the slope of the first range of the Orange Mountains. With an average altitude of 300 feet, it has become noted for its healthful climate.

History.—Montclair had its origin over two centuries ago in the little settlement "Cranetown," then an outlying plantation of Newark. The early settlers were English, who came to New Jersey from the colony of New Haven. In 1812 Bloomfield, including Cranetown, then known as West Bloomfield, was organized as a separate township. In 1860 the name of Montclair was substituted for West Bloomfield, and in 1868 Montclair, together with the Dutch settlement Speertown—the nucleus of Upper Montclair—was incorporated as a separate township. In 1894 Montclair became a town.¹

Population.—In 1910, according to the Federal census, Montclair had a population of 21,550, of which, after the native white group, the next largest factors were the Negroes (11.5 per cent) and the Italians (7 per cent) with an additional 2.8 per cent native-born of Italian parentage. The estimated population for 1912, the year which this infant mortality study covers, was approximately 24,000.²

Wealth.—Due partly to its healthful climate and attractive location and partly to the efforts which have been made to add to the natural beauty of the town, Montclair has become one of the most pleasing of the New York suburbs. Many New York business and professional men have recognized its desirability and have built there comfortable suburban homes. That Montclair is a town of exceptional wealth is shown by the comparison of the assessed valuation of property in towns of approximately the same size—i. e., 20,000 to 30,000 population. In 1912 it had an assessed property valuation of \$40,319,062, which was considerably higher than that of any other New Jersey city or town of the same population group and higher than that of any city or town of the United States in the same group with the exception of Brookline, Mass., and Newport, R. I.³

¹ Whittemore, *History of Montclair, N. J.*

² *Annual Report of the Board of Health, 1913*; estimate based on arithmetic method of U. S. Bureau of the Census for approximating population for intercensal years.

³ U. S. Bureau of the Census *Report on Assessed Valuation of Property and Amounts and Rates of Levy, 1890-1912.*

Industries.—Montclair is preeminently a town of homes. The residents have apparently discouraged the location of industrial enterprises. In 1912 an electrical establishment employing 12 persons and a coated-paper factory employing 200 persons constituted the only industrial establishments in the town.¹

Liquor licenses.—Liquor licenses are granted in Montclair by a majority vote of the town council. In 1912 licenses were held by 8 inns and taverns and 3 wholesale houses.²

Hospitals.—Mountainside Hospital is supported by citizens of the following seven towns: Bloomfield, Caldwell, Cedar Grove, Essex Falls, Glen Ridge, Montclair, and Verona. In 1912 there were admitted to the hospital 1,363 cases, of which 158 were maternity cases. One hundred and thirty-one infants were born and 5 infants died at the hospital during the same year.³

St. Vincent Nursery and Babies Hospital is maintained by the Sisters of Charity for babies under 2 years. During 1912 only 2 of the 112 inmates entered from Montclair.

Social agencies.—The social agencies of Montclair are organized in a council of philanthropy to promote cooperation and prevent duplication of effort. The following agencies are registered with the Council of Philanthropy and send representatives to the monthly meetings:

Altruist Society.

Board of Education.

Board of Health.

Children's Home Association.

Committee of the Federation of Women's Organizations.

Day Nursery.

Daughters of American Revolution.

Fresh Air and Convalescent Home.

Homeopathic Society.

Montclair Civic Association.

Mountainside Hospital.

New England Society.

Tuberculosis Prevention and Relief Association.

Poor master.

Sons of American Revolution.

The Altruist Society corresponds to the charity-organization societies of other communities. It acts as a sort of clearing house and maintains at its headquarters a card index in which are registered all cases receiving help from any of the agencies represented in the Council of Philanthropy.

¹ Industrial Directory of New Jersey, compiled and published by the New Jersey Bureau of Statistics, 1912.

² Annual Report of Town Council, Montclair, N. J., 1912.

³ Annual report of Mountainside Hospital, 1912.

ANALYSIS OF INFANT MORTALITY, MONTCLAIR, 1912.

Although the group of babies found in a city the size of Montclair is necessarily small, and there are manifest limitations to an analysis of the information concerning the 402 births and 34 infant deaths included in the Montclair inquiry, it is interesting to find that the data collected in this study agree in general with the findings of the more comprehensive inquiries into infant mortality which have been made in this and foreign countries.

INFANT MORTALITY RATE.

The results of the study in Montclair show that of the 402 babies included in the investigation 34 died before they were 1 year old, giving an infant mortality rate for this selected group of 1912 babies of 84.6 per 1,000 live births. This rate is slightly less than the rate (89) for the same year computed according to the usual method¹ and published in the board of health report for that year. The average rate for the five years from 1909 to 1913, computed according to the usual method, was 84.8, which was but slightly lower than the rate (89) for 1912. In 1913 the rate dropped to 64.

Because of this country's inadequate system of birth registration it is impossible to show the infant mortality of any one city as compared with that of other cities throughout the United States. The following table, however, shows the infant mortality rates for 1912 in cities of approximately the size of Montclair (i. e., 20,000 to 30,000 population) within the so-called area of birth registration:²

Live births, deaths under 1 year, and infant mortality rate in 1912 for cities and towns of 20,000 to 30,000 population (1910) within the area of birth registration.

City.	Live births.		
	Total.	Deaths under 1 year.	
		Number. ³	Infant mortality rate.
Maine:			
Lewiston.....	631	110	174.3
Bangor.....	371	53	142.9
New Hampshire: ⁴			
Nashua.....	616	82	133.1
Concord.....	378	43	113.8
Vermont:			
Burlington.....	564	95	171.5
Massachusetts:			
Chicopee.....	953	169	177
North Adams.....	548	62	113.1
Gloucester.....	476	52	109.2
Medford.....	551	55	99.8
Waltham.....	634	55	86.8
Brookline.....	418	23	55

¹ For explanation of usual method of computing infant mortality rate, see page 8.

² Comprising the New England States, Pennsylvania, and Michigan, New York City, and Washington, D. C.

³ From State report.

⁴ Figures for New Hampshire by correspondence, as State report not yet available.

Live births, deaths under 1 year, and infant mortality rate in 1912 for cities and towns of 20,000 to 30,000 population (1910) within the area of birth registration—Continued.

City.	Live births.		
	Total.	Deaths under 1 year.	
		Number.	Infant mortality rate.
Connecticut:			
Norwich.....	641	90	140.4
Danbury.....	540	72	133.3
Middletown.....	575	75	130.4
Norwalk.....	509	48	94.3
Meriden.....	747	81	108.4
Stamford.....	799	105	131.4
Rhode Island: ¹			
Central Falls.....	691	120	173.7
Warwick.....	653	87	133.1
Cranston.....	485	56	115.5
Newport.....	541	42	77.6
Michigan:			
Battle Creek.....	477	65	136.3
Muskegon City.....	682	59	86.5
Pennsylvania: ¹			
Shenandoah.....	870	217	249.4
Pottsville.....	457	69	151
Hazleton.....	758	93	122.7
Norristown.....	630	78	123.8
Easton.....	619	60	96.9
Butler.....	597	63	105.5

¹ Figures for Rhode Island and Pennsylvania by correspondence, as State reports not yet available.

The census report on mortality statistics for 1911 gives the estimated infant mortality rate for the birth registration area of the United States for 1910 as 124. This estimated rate may be compared with the rates for foreign countries in the following table, in which the 1912 figures have been given wherever possible, and in all other cases the year indicated is the latest year for which statistics are available.

Deaths of infants under 1 year of age per 1,000 live births in foreign countries for the latest year for which statistics are available.¹

Country.	Year.	Deaths under 1 year per 1,000 live births.	Country.	Year.	Deaths under 1 year per 1,000 live births.
Chile.....	1911	332	Servia.....	1911	146
Russia.....	1909	248	Switzerland.....	1911	123
Ceylon.....	1912	215	Scotland.....	1911	112
Jamaica.....	1912	193	Ontario.....	1912	110
German Empire.....	1911	192	Finland.....	1912	109
Roumania.....	1912	186	England and Wales.....	1912	95
Hungary.....	1912	186	Denmark.....	1912	93
Austria.....	1912	180	Netherlands.....	1912	87
Bulgaria.....	1909	171	Ireland.....	1912	86
Belgium.....	1911	167	France.....	1912	78
Japan.....	1910	160	Australia.....	1912	72
Spain.....	1907	158	Sweden.....	1911	72
Italy.....	1911	153	Norway.....	1911	65
Prussia.....	1912	146	New Zealand.....	1912	51

¹ Compiled from statistics contained in the Seventy-fifth Annual Report of the Registrar General of Births, Deaths, and Marriages in England and Wales, 1912.

ENVIRONMENT.

Neighborhood incidence.—The fourth ward is the most congested section of Montclair, and in it is found most of the negro and foreign population of the town, the Italian being the predominating nationality. Moreover in 1912, according to the report of the board of health, the tenement-house population of ward 4 was 1,476, or 27.3 per cent of the population of the ward, and 268 children under 5 years of age, or 38.4 per cent of the children of that age in the ward, were living in tenements. In this ward were located 80 of the 113 tenement houses of Montclair.¹

The other wards, except for a few scattered groups of shabby-looking cottages, are almost uniformly attractive residential sections with well-kept shaded streets, comfortable one-family dwellings, and plenty of open space. The finest residences are to be found on the mountain in the section extending across the upper portions of the second, third, and fifth wards. The business district of Montclair is almost exclusively confined to Bloomfield Avenue, which is the main street of the town.

The variation in the infant mortality rate in different sections of the town is shown in the following table:

TABLE 1.—*Population, births, deaths under 1 year, and infant mortality rate, by wards.*

Ward.	Population, 1912 (esti- mated). ¹	Live births.	Deaths under 1 year.	Infant mortality rate.
The town.....	23,896	402	34	84.6
Ward 1.....	2,848	44	3	68.2
Ward 2.....	4,831	78	4	51.3
Ward 3.....	5,050	43	3	69.8
Ward 4.....	5,406	161	21	130.4
Ward 5.....	4,761	76	8	89.5

¹ Annual Report of the Board of Health of the Town of Montclair, N. J., p. 21. 1912.

The highest rate as well as the greatest number of infant deaths was found in the fourth ward, which also had the highest birth rate. In 1912 almost twice as many babies died in the fourth ward as in all the other wards combined. The rate for this ward (130.4) was more than one and one-half times as high as the rate (84.6) for the town as a whole.

In 1913, however, the infant mortality rate for the fourth ward was lower than the rate for the second and third wards, while in 1914 its rate was lower than the average for the entire town. This gratifying decrease in the infant death rate of the most congested section of the town should probably be ascribed largely to the development of the baby clinic,² with the "follow-up" visits of the nurse to the mothers in their homes and to the careful supervision by the board of health of the housing and sanitation of this section.

¹ For definition of tenement house, see p. 14.

² For baby clinic, see page 28.

Table 2 shows the distribution of births and of deaths of infants under 1 year of native white, foreign white, and negro mothers in the various wards. By far the greatest number of births to foreign and negro mothers occurred in the fourth ward.

TABLE 2.—*Births and deaths under 1 year, according to nativity and color of mother, by wards.*

Ward.	All mothers.		Native white mothers.		Foreign-born white mothers.		Negro mothers.	
	Births.	Deaths under 1 year.	Births.	Deaths under 1 year.	Births.	Deaths under 1 year.	Births.	Deaths under 1 year.
The town.....	402	34	143	7	198	17	66	10
Ward 1.....	44	3	33	2	9	.....	2	1
Ward 2.....	78	4	40	2	26	1	12	1
Ward 3.....	43	3	22	.....	11	1	10	2
Ward 4.....	161	21	30	2	103	13	28	6
Ward 5.....	76	3	18	1	44	2	14	.....

Housing.—Generally speaking, the housing in Montclair is good. The most common type of house is the two story and attic frame cottage for one family, with a yard of good size. The town's housing problem resolves itself for the most part into that of improving conditions in the fourth ward, where one finds the greatest congestion and overcrowding, where one notices the greatest number of houses of unkempt appearance and in bad repair, and where one occasionally finds basement tenements and constantly sees dirty yards.

The fourth ward in 1912 filed with the board of health more complaints against nuisances than any other ward. There were 26 complaints about plumbing from this ward, or 56 per cent of the plumbing complaints for the entire town.

According to the definition of a "tenement house" which appears in the State tenement-house act¹ there were in the town, December 31, 1912, 133 tenement houses, 20 of which would be ordinarily classed as apartment houses. The Annual Report of the Board of Health for 1912 gives the following interesting statistics as to certain living conditions of the tenement-house population:

The entire tenement-house population averages 1.26 persons per room, or 5 persons to every four rooms; the colored population averages 1.01 persons per room, the Italian 1.67, and the other white population 0.86. Over half of the tenement-house population lives in three-room tenements, with an average of 1.4 persons per room. There are 95 families in two-room tenements and 3 in one-room tenements. All of the tenement houses are provided with sewer connection for water-closets and sinks.

¹ A tenement house is any house or building or portion thereof which is rented, leased, let, or hired out to be occupied or is occupied as the home or residence of three families or more living independently of each other and doing their cooking upon the premises, or by more than two families upon any floor so living and cooking but having a common right in the halls, stairways, yards, water-closets, or privies, or some of them.

As will be shown in the discussion of sewage disposal, Montclair is well sewered. In 1912 there remained in the town 76 privies on unsewered streets and 26 privies on streets in which there were sewers. It should be said, however, that the board of health has passed an ordinance providing that all privy vaults which for lack of a public sewer in the street can not be abolished must be made water-tight and provided with a fly-tight superstructure and self-closing covers.

Although it is recognized that it would be impossible to determine the relative importance of any particular housing defect in its relation to infant mortality, nevertheless a classification of babies visited according to the type of home in which they were found may be of interest. Babies who died during the first week have been excluded from the following summary because it was felt that in a considerable number of these cases prenatal influences must have been largely responsible for their deaths. Nor have illegitimate babies been included, since their home conditions were abnormal. The figures are too small to be conclusive, but they show a tendency toward an increase of infant deaths where poor housing conditions were found.

Although in Montclair was found a large group of babies whose parents owned their homes and an additional group whose parents paid over \$30 a month rent, over one-third of the babies lived in homes where the rental was less than \$15 a month.

It will be seen that 23 of the babies visited lived in homes where the toilet was a yard privy and 129 in homes in which was no bathtub. A large number of homes were reported as dirty or only moderately clean, and a still larger number of yards were reported as dirty.

The means for ventilation of the baby's room was in most cases good. The actual ventilation, however, which is shown in the summary, depended on the custom of the mother or attendant.

TABLE 3.—*Babies surviving at least one week and deaths under 1 year of age, according to specified housing conditions.*

Housing conditions.	Num-ber.	Deaths under 1 year.	Housing conditions.	Num-ber.	Deaths under 1 year.
Total.....	384	19	Yard:		
Monthly rental:			Clean.....	199	8
Under \$15.....	135	8	Unclean.....	181	11
\$15 to \$30.....	76	5	No yard.....	4	.....
\$30 and over.....	32	1	Toilet:		
Free rent.....	9	1	Water-closet.....	361	15
Home owned.....	119	2	Yard privy.....	23	4
Not reported.....	13	2	Ventilation of baby's room:		
Cleanliness of home:			Good.....	188	7
Clean.....	226	9	Fair.....	115	4
Moderately clean; dirty.....	158	10	Poor.....	82	8
Bath:			Not reported.....	1	.....
Bathtub.....	255	3			
No bathtub.....	129	16			

NATIVITY, NATIONALITY, AND COLOR OF MOTHER.

Table 4 shows the variation in the infant mortality rate of Montclair according to the nativity, nationality, and color of mother. The death rate for babies of native white mothers (49 per 1,000 live births) is very low; the rate for babies of foreign-born mothers (88.1) is slightly higher than for the town as a whole, while the rate among negro babies (151.5) is more than three times as high as among babies of native white mothers.

More foreign-born white mothers were interviewed than native white mothers, which fact, considering the small proportion of foreign-born population in Montclair, appears to indicate a higher birth rate among the foreign-born women. The Italians formed by far the largest group of the foreign-born mothers, only small groups of mothers of British, Scandinavian, German, and other nationalities being represented among the births in 1913. Nearly all the negro mothers were native.

TABLE 4.—*Births, deaths under 1 year, and infant mortality rate, according to nativity, nationality, and color of mother.*

Nativity, nationality, and color of mother.	Births.	Deaths under 1 year.	Infant mortality rate.
All mothers.....	402	34	84.6
Native white.....	143	7	49
Foreign-born white.....	193	17	88.1
Italian.....	112	10	89.3
Others.....	81	7	86.4
British.....	33	2	(1)
Scandinavian.....	21	2	(1)
German.....	9	2	(1)
All others.....	18	1	(1)
Negro.....	66	10	151.5
Native.....	59	10	169.5
Foreign.....	7	.....	.....

¹ Total number of births less than 40; base therefore considered too small for use in computing an infant mortality rate.

² Includes 2 Swiss, 6 Canadian, 4 Russian, 2 Polish, 2 Hebrew, 1 Greek, and 1 Armenian.

³ Includes 6 West Indians and 1 Bermudian.

Because of the small numbers in each group it is impossible to show a comparison of infant mortality rates among the various foreign nationalities represented in the inquiry. Table 4 shows, however, that in the largest single nationality group (the Italian) the infant mortality rate was somewhat higher than in the others.

The Italians and Negroes, the two largest population groups after the native white, seem to have been attracted to Montclair by the opportunities offered for unskilled labor and domestic service. The fathers of the negro babies visited during the inquiry were for the most part servants, chauffeurs, janitors, and laborers, and the fathers of the Italian babies were generally small tradesmen, teamsters, and laborers.

AGE AT DEATH AND DIRECT CAUSE OF DEATH.

The first 3 months of a baby's life are generally admitted to be the most critical of the first year. Of the 34 infant deaths, 24, or 70.6 per cent, occurred during the first quarter. Ten of the 34 babies died when 1 day or less than 1 day old.

TABLE 5.—Number and per cent of deaths under 1 year occurring in each specified period.

Period.	Number.	Per cent.
Deaths in first year.....	34	100.0
Deaths in first 3 quarters.....	32	94.1
Deaths in first 2 quarters.....	28	82.4
Deaths in first quarter.....	24	70.6
Deaths in first month.....	13	38.2
Deaths in first day.....	10	29.4

The next table shows the infant deaths classified according to the immediate cause, or the disease directly responsible for death, as certified by the attending physician.

TABLE 6.—Deaths under 1 year, according to cause of death of infant and nativity and color of mother.

Cause of death.	Deaths of babies of—			
	All mothers.	Native white mothers.	Foreign-born white mothers.	Negro mothers.
All causes.....	24	7	17	10
Diseases of digestive tract.....	11	1	6	4
Premature birth or congenital debility.....	9	3	6	—
Diseases of respiratory tract.....	7	1	2	4
Malignant.....	3	1	1	1
All other causes.....	4	1	2	1

¹ Peritonitis. ² Includes 1 case of asphyxia neonatorum and 1 case of diphtheria. ³ Acute nephritis.

Eleven babies of the group studied died from digestive diseases. Eight of these 11 deaths occurred in the fourth ward. It is significant that only 1 of the 11 was being exclusively breast fed at the time of death, 4 were partly breast fed, and 6 were bottle fed. The fatality from diarrheal diseases is always found to be higher during the summer months. Eight of the 11 infant deaths in Montclair from these diseases occurred in July and August.

In 1913 special efforts were made to lower the deaths from diarrhea. The baby clinic was by this time established on a sound basis, with a physician in consultation and the board of health nurse to follow up the doctor's instructions and to give the mothers directions in their own homes as to infant hygiene and the preparation of feedings. In 1913 there was not a single infant death from diarrhea.¹ Although the 1913 record is, of course, abnormal, such a decided decrease seems

¹ Annual Report of the Board of Health of the Town of Montclair, N. J., p. 51. 1913.
85978°—15—3

to indicate that definite efforts have been put forth to check the infant deaths from this disease.

Of the 34 deaths of Montclair babies 9 were from prematurity or congenital debility. As a large proportion of these deaths is usually ascribed to prenatal causes, it would seem that in Montclair further care of the mothers is needed during their period of pregnancy.

In Montclair some few prospective mothers are reached during their pregnancy by the women's clinic which since 1904 has been held twice a week at the Mountainside Hospital. Obstetrical cases coming to the hospital for advice have been referred to this clinic. The number of mothers who have the advantage of clinical advice, however, is small, and it would seem either that the existence of the clinic should be more widely advertised or that the prenatal work should be reorganized to include regular visits of a nurse to the prospective mother in her own home.

Syphilis has long been recognized as a factor among the causes of fetal deaths and deaths of early infancy. Venereal diseases were made reportable in Montclair in March, 1913. During the remainder of that year 14 cases of syphilis and 4 of gonorrhea were reported. A recent ordinance of the board of health (Dec. 8, 1914) provides that treatment of persons found to be affected with venereal disease shall be compulsory.

There were 7 deaths from respiratory diseases, of which 6 occurred in February and 1 in March. Three babies died of malnutrition and 1 from each of the following causes: Asphyxia neonatorum, diphtheria, peritonitis, and acute nephritis.

SEX.

It is generally found that infant mortality is higher among males than among females. The mortality rate of male infants in Montclair was found to be 88.2 and of female infants 80.8.

ILLEGITIMACY.

Only 7 of the 402 babies included in this investigation, or 1.7 per cent, were born out of wedlock. Four of the 7 were in the fourth ward, 2 in the first ward, and 1 in the second. One was of native white parentage, 2 of Polish, 1 of Italian, 1 of Swedish, and 2 of negro. Four of the 7 died—3 of enterocolitis and 1 of inanition.

ATTENDANT AT BIRTH.

It is perhaps of some interest to know to what extent mothers are attended at birth by midwives. Montclair has a considerable group of midwife cases, mostly among the Italian mothers. There are two possible explanations for this condition—one, the national custom among the Italians; the other, the lower fee demanded by the midwife, who in addition will render certain little household

services. Seventy-four of the 402 births included in this study were attended by midwives; of this number 65 were births to foreign-born white mothers. Only 5 native white mothers and 4 negro mothers were attended by midwives.

The midwives of New Jersey are licensed by the State board of medical examiners after an examination before the board and are required to register at the office of the county clerk. The law provides that they shall always secure the services of a reputable physician upon the appearance of any abnormal symptoms in either mother or child. Whenever a midwife files a birth certificate with the Montclair Board of Health the nurse calls on the following day at the address given to verify the information on the certificate. In this way she can determine incidentally whether the mother and child received proper attention at the hands of the midwife. A recent amendment of the sanitary code of Montclair provides that a midwife when called to a case shall report immediately to the board of health the name and address of the patient. This provision will enable the board of health nurse to be present at the delivery when it is considered advisable and will be a means of further supervision of midwives.

ECONOMIC STATUS OF THE FAMILY.

It is obvious that even the care given the baby by its mother often must be offset by the evils resulting from an income insufficient for the family's needs, since a low income frequently must involve undesirable housing accommodations, an overworked mother, insufficient nourishment for mother and child, and lack of competent medical advice. Sir Arthur Newsholme has found in his English studies that "infant mortality is higher among the poor than among the well to do, although natural feeding of infants is probably more general among the former."¹ Table 7 shows that in Montclair the infant mortality rate was approximately two and one-half times as high among families where the income was less than \$12 a week as among families where the income was \$23 a week or more.

TABLE 7.—*Births, deaths under 1 year, and infant mortality rate, according to total family income.*

Total family income.	Births.	Deaths under 1 year.	Infant mortality rate.
Total.....	395	30	75.9
Under \$225.....	95	11	115.8
\$225 to \$1,199.....	111	9	81.1
\$1,200 and over.....	128	6	46.9
Not reported.....	61	4	65.6

¹ Report on Infant and Child Mortality, by the medical officer of the local government board, 1909-10. London, 1910.

² Exclusive of illegitimate births.

The following table shows that of the 95 babies living in families where the income was less than \$625 only 5 were babies of native white mothers, 66 were babies of foreign-born white mothers, and 24 babies of negro mothers. Of the 128 babies in the group with an income of \$1,200 and over, 100, or 78.1 per cent, were babies of native white mothers.

TABLE 8.—*Number of births, according to total family income and nativity and color of mother.*

Total family income.	All mothers.	Native white mothers.	Foreign-born white mothers.	Negro mothers.
Total.....	1 395	142	189	64
Under \$625.....	95	5	66	24
\$625 to \$1,199.....	111	24	54	33
\$1,200 and over.....	128	100	26	2
Not reported.....	61	13	43	5

¹ Exclusive of illegitimate births.

The father's occupation gives some indication of the economic and social position of the family and the standard of living which they must undertake to maintain.

TABLE 9.—*Births, deaths under 1 year, and infant mortality rate, according to occupation of father and nativity and color of mother.*

Occupation of father.	All mothers..			Native white mothers.			Foreign-born white mothers.			Negro mothers.		
	Deaths under 1 year.			Deaths under 1 year.			Deaths under 1 year.			Deaths under 1 year.		
	Births.	Number.	Infant mortality rate.	Births.	Number.	Infant mortality rate.	Births.	Number.	Infant mortality rate.	Births.	Number.	Infant mortality rate.
All occupations.....	1 395	30	75.9	142	7	49.3	189	15	79.4	64	8	125
Professional and business...	120	5	41.7	88	4	45.5	31	1	(²)	1	—	—
Skilled trades.....	121	9	74.4	41	3	73.2	66	6	90.9	14	—	—
Semiskilled and unskilled trades, domestic service..	148	15	101.4	12	—	—	89	8	89.9	47	7	148.9
Not reported.....	6	1	(²)	1	—	—	3	—	—	2	1	(²)

¹ Exclusive of illegitimate births.

² Total number of live births less than 40; base therefore considered too small for use in computing an infant mortality rate.

The group of babies whose fathers were professional or business men shows the extremely low infant mortality rate of 41.7. In the "skilled trades" group the rate has risen to 74.4, while among babies whose fathers are engaged in semiskilled trades, unskilled trades, and domestic service the rate is 101.4—more than double the rate for the first group. It will be seen that unskilled workers form a large group among the foreigners and Negroes, while few professional or business men are found in these population groups.

MOTHERS.

Occupation.—The mother's occupation bears a very close relation to the welfare of the baby. If the mother's employment during pregnancy involves the strain of long hours and hard work, the result is that she is less fit to bear the child or care for it after its birth. Her employment outside the home after the birth of the child means that the baby during her absence must depend for its care upon a relative, neighbor, or paid attendant; it means also the cessation of breast feeding. Table 10 shows that only 45 Montclair mothers were engaged in any occupation other than that of housekeeping for their own families. Of the 45 mothers who were gainfully employed, about three-fourths (34) were engaged in domestic or personal service, including the mothers who were living out in service, those who went out by the day, those who did laundry work either in their own homes or elsewhere, and those who kept lodgers. One mother was employed in a jam factory and 10 were helping either regularly or occasionally in their husbands' stores. A comparison of the infant deaths among babies of working and of nonworking mothers shows that a much larger proportion of babies of working mothers failed to survive their first year; there were 10 deaths among the 45 babies of working mothers as contrasted with 24 deaths among the 357 babies of nonworking mothers.

TABLE 10.—*Births and deaths under 1 year, according to occupation, nativity, and color of mother.*

Occupation of mother.	All mothers.		Native white mothers.		Foreign-born white mothers.		Negro mothers.	
	Births.	Deaths under 1 year.	Births.	Deaths under 1 year.	Births.	Deaths under 1 year.	Births.	Deaths under 1 year.
All occupations.....	402	34	143	7	193	17	66	10
Mothers not gainfully employed.....	357	24	141	7	178	15	38	2
Mothers gainfully employed..	45	10	2	.....	15	2	28	8
Domestic or personal service.....	34	10	1	.....	6	2	27	8
Retail trade.....	10	.....	1	.....	8	.....	1	.....
Factory employment....	1	.....	.....	.....	1	.....	.....	.....

Literacy.—Comparisons are shown in the following table between the infant mortality of babies of literate and of illiterate mothers, and of babies of mothers who can speak English and of those who must depend on a foreign language. Only babies of foreign-born white mothers have been included in these computations. The presence in the community of comparatively large groups of illiterate mothers and of mothers who can not speak English increases the problem presented to the agencies interested in infant-welfare work, for the illiterate mothers are generally less careful in following instructions than the more intelligent mothers, while the mothers who do not

speaking English must explain their difficulties through an interpreter. The rate of infant mortality in Montclair is found to be relatively high among babies of illiterate mothers and of mothers who can not speak English.

TABLE 11.—*Births, deaths under 1 year, and infant mortality rate, according to the mother's literacy and ability to speak English, for all babies of foreign-born white mothers.*

Mother's literacy and ability to speak English.	Births.	Deaths under 1 year.	Infant mortality rate.
All mothers.....	193	17	88.1
Literacy:			
Literate.....	104	8	78.9
Illiterate.....	83	9	108.4
Not reported.....	6		
Ability to speak English:			
Can speak English.....	121	9	74.4
Can not speak English.....	70	8	114.3
Not reported.....	2		

¹ Unable to read and write in any language.

FEEDING.

Authorities agree that the breast milk of the mother is the best possible food for the baby, particularly during the early months of its life. It is significant that of the 23 babies who died within the first year but after the first week only 5 were exclusively breast fed at the time of their death, 6 were partly breast fed, and 12 were artificially fed.

Table 12 shows the type of feeding prevailing among Montclair babies at different ages. "Breast fed" as used in this report means that the baby was nursed and had no artificial food whatever; "partly breast fed" means that the baby was nursed but was being given artificial food as well; "artificially fed" means that the baby had been completely weaned.

TABLE 12.—*Number and per cent of babies receiving specified type of feeding at 3, 6, and 9 months, respectively, according to nativity and color of mother.*

Age of baby and nativity and color of mother.	Alive at age indicated.	Breast fed.		Partly breast fed.		Artificially fed.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Babies of all mothers:							
Aged 3 months.....	378	290	76.7	14	3.7	74	19.6
Aged 6 months.....	374	196	52.4	36	9.6	142	38
Aged 9 months.....	370	92	24.9	91	24.6	187	50.5
Babies of native white mothers:							
Aged 3 months.....	137	85	62	5	3.6	47	34.3
Aged 6 months.....	137	55	40.1	12	8.8	70	51.1
Aged 9 months.....	136	22	16.2	25	18.4	89	65.4
Babies of foreign-born white mothers:							
Aged 3 months.....	179	159	88.8	5	2.8	15	8.4
Aged 6 months.....	178	112	62.9	20	11.2	46	25.8
Aged 9 months.....	177	54	30.5	56	31.6	67	37.9
Babies of negro mothers:							
Aged 3 months.....	62	46	74.2	4	6.5	12	19.4
Aged 6 months.....	59	29	49.2	4	6.8	26	44.1
Aged 9 months.....	57	16	28.1	10	17.5	31	54.4

Over three-fourths of the Montclair babies living at the end of their first quarter were breast fed at that age; over one-half were breast fed at the end of their first 6 months; and over one-half had been completely weaned at the end of their first 9 months.

Foreign-born white mothers nursed their babies longer than either the native white or negro mothers. Only one-twelfth of the foreign-born white mothers were feeding their babies artificially at the end of the first three months as contrasted with approximately one-fifth of the negro mothers and one-third of the native white mothers. At the end of nine months almost two-thirds of the native white mothers, slightly over one-half of the negro mothers, and little more than one-third of the foreign-born mothers were feeding their babies artificially.

From Table 13, showing the variations in the type of feeding according to the father's earnings, it is apparent that, generally speaking, as the income increased maternal nursing decreased. That a high infant mortality rate accompanied a low income has already been shown.¹ It would seem, then, that the disadvantages of a low income were sufficient to offset the greater prevalence of breast feeding among the babies of the poorer families.

TABLE 13.—*Distribution of babies of specified age by earnings of father and number and per cent of such babies completely weaned from breast.*

Babies living at specified age.	Annual earnings of father.				
	Total.	Under \$25.	\$25 to \$99.	\$99 and over.	Not reported.
3 months.....	372	118	55	169	30
Completely weaned from breast.....	73	15	7	45	6
Per cent.....	19.6	12.7	12.7	26.6	20
6 months.....	371	118	55	169	29
Completely weaned from breast.....	138	35	11	76	16
Per cent.....	37.2	29.7	20	45	55.2
9 months.....	367	117	53	168	29
Completely weaned from breast.....	183	42	22	98	21
Per cent.....	49.9	35.9	41.5	58.3	72.4

CIVIC FACTORS TENDING TO REDUCE INFANT MORTALITY.

EXPENDITURES FOR HEALTH AND SANITATION.

Of the 110 cities in the United States with a population approximating that of Montclair, i. e., 20,000 to 30,000, Montclair in 1913 ranked fourth in its per capita expenditure for health and sanitation; of the five New Jersey cities within the same population group, Montclair ranks first. The following figures are taken from the

¹ See Table 7, p. 19.

bulletin of the Bureau of the Census on "Municipal revenue, expenditures, and public properties, 1913":

Cities in 20,000 to 30,000 population group.	Expenditures ¹ for health and sanitation.	
	Total.	Per capita.
United States:		
Newport, R. I.	\$79,135	\$2.76
Wilmington, N. C.	58,344	2.14
Stockton, Cal.	51,132	2.04
Montclair, N. J.	43,675	1.82
Waltham, Mass.	47,466	1.62
Madison, Wis.	46,894	1.62
Newburgh, N. Y.	45,157	1.57
Richmond, Ind.	34,390	1.46
Long Beach, Cal.	32,933	1.44
Winston-Salem, N. C.	31,206	1.43
New Jersey:		
Montclair	43,675	1.82
Plainfield	30,132	1.35
New Brunswick	19,663	.80
Kearney	12,050	.57
Union	10,749	.47

¹ Including expenditures for board of health, collection of ashes and garbage, sewer connections, maintenance and repair, and street cleaning.

ACTIVITIES OF BOARD OF HEALTH.

BIRTH REGISTRATION.

In Montclair the health officer is also the registrar of vital statistics. The law provides that births shall be registered within five days. Various methods are in use to make the registration of births as full and accurate as possible. All death records of children are checked back upon the birth returns.

When a birth certificate is filed by a midwife or by any other person than a physician the board of health nurse visits the mother on the following day to see that the certificate has been filled out correctly. This practice provides a check on the midwives who are apt to be careless in their returns.

In 1912 one physician was fined \$200 for failure to register 10 births. Three canvasses from house to house for the purpose of securing unreported births have been made during the past eight years in sections of the city where mothers are attended by midwives. Since January 1, 1914, a very interesting plan for furthering registration has been in use. As soon as the attending physician or midwife files a certificate of birth a transcript is made by the board of health on an attractive form bearing the official seal of the board of health and is mailed to the mother, together with the following circular explaining the importance of birth registration, and asking her to correct any errors on the certificate:

IMPORTANT NOTICE.

The accompanying certificate of birth is an exact copy of the original certificate that is on file at this office. As this is a permanent record, a record by which a child

may be admitted to school; a record by which he (or she) may prove that he is of sufficient age to leave school and go to work; a record by which he may prove his right to vote, or to marry, or to come into possession of money that has been left to him; a record by which he may prove his place of birth or age as a prerequisite to holding certain public offices, it is imperative for the future good of the infant that all facts recorded at the time of his birth shall be accurate, and you are therefore requested to return this certificate for correction if any inaccuracy is noted. It is of particular importance that the names of the infant and of both parents shall be spelled correctly. If the name of the infant is changed, the certificate should be returned at once for correction.

A certificate similar to the inclosed form has been sent to the parents of every child born in Montclair since January 1, 1914, and you will confer a favor upon your friends by urging them to secure such a certificate if they have a child for which a certificate has not been received, for there may be some infants whose births have not been recorded at this office and who may thereby be put to great inconvenience in later years. Parents who desire may obtain, free of charge, certificates for children whose births occurred in Montclair prior to January 1, 1914, by making application at the office of the board of health, Municipal Building, Montclair, N. J.

MONTCLAIR BOARD OF HEALTH.

The mothers are beginning to learn that they should receive one of the official certificates and to ask for it in case it fails to come. Thus unreported births are brought to light.

SUPERVISION OF THE MILK SUPPLY.

For several years Montclair has had the advantage of an excellent milk supply, and Montclair mothers, whether rich or poor, have been able to secure pure milk for their babies. The board of health recognizes that one of its most important functions is the supervision of the town milk. Stringent regulations have been adopted and are rigidly enforced.¹ The system worked out consists of two checks upon impure milk—laboratory analysis and dairy inspection. Montclair is one of the few towns of its size with a bacteriological laboratory. The laboratory of the board of health is completely equipped with standard apparatus. The milk tests are made by a trained bacteriologist, who examines the milk for bacteria count, butter fats, solids, and sediment.

Laboratory analysis.—During 1912, 307 samples of milk were analyzed, averaging over 2 samples a month for each supply, since there were in that year 11 supplies for the town. The bacteria limit fixed by ordinance is 100,000 bacteria per cubic centimeter. In 1912 one supply averaged above this limit. The average count of all supplies weighted according to the quantity delivered by each dealer was 50,000 for raw milk and 8,500 for the pasteurized supply. Only one sample collected during the year contained less than the 11.5 per cent of solids required by law for normal milk.

Dairy inspection.—All the dairies supplying Montclair with milk are inspected at intervals during the year. These dairies numbered

¹ For milk regulations, see p. 31.

99 at the end of 1912. They are scored according to the United States Bureau of Animal Industry score card, the possible score of 100 being subdivided as follows:

Equipment.		Method.	
Total.....	40	Total.....	60
Cows.....	8	Cleanliness of cows.....	8
Stable.....	18	Cleanliness of stable and yard.....	16
Utensils.....	10	Cleanliness of milk room.....	3
Milk room.....	4	Cleanliness of utensils.....	8
		Cleanliness of milking.....	9
		Handling and cooling of milk.....	16

The following summary ¹ of dairy scores for 1911, 1912, and 1913 shows an improvement each year. All dairies from which cream and pasteurized milk are obtained are included, as well as those supplying raw milk:

Score.	Number of dairies, 1913.	Per cent distribution of dairies.		
		1913	1912	1911
Total.....	113	100.0	100.0	100.0
90 to 100.....	9	8.0	7.1	6.5
80 to 90.....	9	8.0	10.1	10.7
70 to 80.....	83	73.4	72.7	33.4
60 to 70.....	11	9.7	10.1	41.9
Below 60.....	1	.9	.....	7.5

The scores of each individual dairyman, showing equipment, methods, and total score, are published in the board of health report, so that the housewife of Montclair may intelligently choose her milk dealer. The reports also publish detailed descriptions of the individual milk supplies of Montclair with reference to average bacteria count, richness of milk, dairies from which the supply is derived, etc.

SUPERVISION OF THE WATER SUPPLY.

The board of health makes a bacterial analysis of the town water every other day and a complete analysis once a month. The typhoid-fever record of a town is generally taken as some indication of the purity of the water supply. In 1912 there were 15 cases of typhoid fever, but no fatalities.¹

The source of the water supply is the Passaic River above Little Falls. The Montclair Water Co. operates a filtration plant at Little Falls, supplying filtered water to the following municipalities: Paterson, Passaic, part of the township of Acquackanonk, Prospect Park, Little Falls, Montclair, Bloomfield, Glen Ridge, West Orange, Nutley, Kearney, Harrison, East Newark, and Bayonne. The system consists of a mechanical filtration plant with a large settling and coagulating basin and a sterilization plant.

¹ Annual Report of the Board of Health of the Town of Montclair, N. J., 1913.

ACTIVITIES OF THE ENGINEERING DEPARTMENT.

Newsholme recognizes municipal sanitation as one of the chief means for a low infant mortality.

Sewage disposal.—According to the report of the committee on disposal of sewage of Orange, Montclair, and East Orange, 1912, "it may be said that each of the municipalities is quite well sewered in so far as the removal of sewage alone is concerned." In 1912 Montclair had about 63 miles of sanitary sewers, which compared very favorably with its 67 miles of town streets.

The sewage leaves Montclair from the southwest corner of the town and passes through Glen Ridge and into Bloomfield; here the Orange branch sewer and the Montclair branch sewer join, forming the Union outlet sewer. This sewer follows the Second River to a point in North Newark on the west bank of the Passaic River, where the sewage is discharged into the river.

A new system of sewage disposal has been proposed for Orange, Montclair, and East Orange combined. The new plan provides for carrying the sewage of the three towns in new sewers by gravity to a point in Belleville, to be reached at such an elevation that the sewage can pass from there by gravity through sewage-disposal works and discharge, clarified and purified, into the Third River, a tributary of the Passaic. The recommended sewage-disposal works consist of a coarse screen, grit chambers, main settling tanks of the Imhoff type, sludge drying beds, sprinkling filters, chemical house with disinfection equipment, and final settling tanks. The total estimated cost is \$1,080,000, to be shared by the three municipalities.¹

Disposal of ashes and garbage.—The method of disposal of ashes and garbage is as follows: One collection of ashes a week is made in the summer season and two a week during the winter months, three teams being employed in the summer and six in the winter. The material collected is used for filling low areas wherever practicable and in building roadways on dirt streets. The remainder is hauled to the dump on Wildwood Avenue.

Two collections of garbage a week are made from all the households and during the summer months three a week in the business section. The material collected is taken to the north end of the town, where it is dumped into zinc-lined receptacles, which are protected from the weather and provided with means for flushing. The water used in flushing is carried away to a cesspool. The wagon, after dumping, is also flushed. From the tanks the garbage is taken away by farmers of the adjoining country. This method of disposing of the town's ashes and garbage falls short of the present-day standards for this branch of municipal sanitation. The town engineer,

¹ Report on the Disposal of Sewage of Orange, Montclair, and East Orange, N. J., by Rudolph Haring and John E. Gregory, March, 1912.

in his annual report for 1913, advocates a properly designed incinerator and presents the following argument in its favor:

The time is not far away when the lowlands will have become filled and dumps can not be found except with long hauls and with resulting high hauling cost. The garbage dump as at present operated requires constant attention to avoid it becoming a nuisance and at best is insanitary. A properly designed incinerator plant would be a great improvement over the present method and would provide as well a place for the disposal of other wastes for which no provision is at present made. An incinerator plant would also make possible the collection of ashes and garbage by the same wagons and greatly reduce the cost of collections.

Paving.—In the town of Montclair in 1913¹ there were 83.3 miles of streets, of which 8 miles were private streets, 8.2 miles country roads, and 67 miles town streets. Of the 67 miles of town streets 58.9 miles were macadamized, less than a mile (the main business street of the town) was permanently improved or paved, and 7.6 miles were unimproved dirt roads.

THE BABY CLINIC.

The consensus of opinion in Montclair seems to be that the consultations at the baby clinic and the visits of the nurse, who shows the mother in her home how to prepare feedings, have been of the utmost importance in saving the lives of Montclair babies.

The baby clinic, reorganized under its present system in March, 1912, is an instance of a cooperation of social, civic, and private agencies in an effort to save the babies of the community. A weekly clinic for consultation as to feedings and infant hygiene and for medical advice is held at the Montclair Day Nursery under the joint charge of a Montclair physician, who has given her services, and the board of health nurse. Two dairies furnish the clinic babies with certified milk at 10 cents a quart, and the board of health furnishes milk, sugar, barley water, and limewater for modifying the milk to mothers who are unable to pay. The major part of the work consists of the visits of the nurse to teach the mother in her own home how to prepare feedings in accordance with the formula worked out for her baby at the clinic. A card containing the following announcement of the clinic is mailed to the mother of every baby for whom a birth certificate is filed:

SPECIAL ANNOUNCEMENT.

The attention of parents is called to the fact that a clinic for babies is held at the day nursery, Glen Ridge Avenue and Grove Street, Montclair, N. J., at 3 o'clock every Thursday afternoon. If your baby is sick, or if its food does not agree with it, you may obtain medical advice free by taking the infant to the clinic at the hour mentioned. If your baby needs attention on some other day of the week, and you have no physician, telephone to the board of health office (Montclair 2700) and ask to have the nurse call at your home. There is no charge for her service.

MONTCLAIR BOARD OF HEALTH.

¹ First Annual Report of Town Engineer, Montclair, N. J.

The clinic urges breast feeding wherever possible, with supplementary feedings of modified milk where the mother's milk is found to be insufficient.

In the discussion of infant deaths from diarrhea the fact has been noted that while in 1912 diarrhea was the leading cause (disease) of infant mortality, not a single baby died from this disease in 1913. Practically all the clinic babies come from the fourth ward, in which, as has been seen, the infant mortality rate has greatly decreased. The influence of the clinic is felt by a large proportion of the fourth-ward babies, since 83 of the 187 babies born in this ward in 1913 were brought to the clinic, and many more were visited in their homes.¹

¹ Report of Dr. Mercelis to the Montclair (N. J.) Board of Health, on the "Babies milk clinic," March, 1914.



APPENDIX.

MILK REGULATIONS.

[Extracts from an ordinance establishing a sanitary code for the town of Montclair. Passed Apr. 9, 1907, and as amended to Jan. 1, 1915.]

ARTICLE 8.

MILK AND ITS PRODUCTION.

SECTION 1. Any person desiring to engage, either as principal or agent, in the production, sale, or distribution of milk or cream within the town of Montclair may make application therefor to the board of health, upon blanks to be furnished by the board, setting forth the locality from which such person or persons procure the milk or cream; also a full and complete list of the names and addresses of those from whom he purchases milk or cream, and also the place at or from which he desires to sell milk or cream, and whether he desires to sell raw or pasteurized milk or cream, or both. Said application shall also state whether the applicant desires to sell as principal or agent, and if as agent, give the name of his principal. It shall be signed by the applicant, and if granted by the said board a license shall be issued to him signed by the president and secretary of the board in the following form:

["Board of health, Montclair, N. J. Milk license No. ———.]

"———, of ———, is hereby licensed to engage in the business of selling and distributing in the town of Montclair (raw or pasteurized) milk and cream from (store or wagons) for a period of one year from the date hereof: *Provided*, That if such person or any of his employees, servants, or agents shall violate any ordinance of the said board in conducting said business, or any of the provisions of an act entitled 'An act to regulate the production, distribution, and sale of milk or cream,' approved March 30, 1914, or other statutory regulations of such sales, this license may, in the discretion of the board, be revoked by the board.

"Dated at Montclair, N. J., this ——— day of ———, 191——."

The annual license fee shall be \$1 for each place at or from which milk is sold and for each wagon or vehicle used in the distribution thereof.

All persons engaged in the business of selling milk or cream in the town of Montclair at the date when this ordinance takes effect, who desire to continue the same, must file their applications for a license not later than the Monday before the second Tuesday of January of each year. Licenses when granted shall be for a period of one year from the time of granting the same: *Provided*, That any licenses so granted may be vacated by the board in case the licensee or any of his employees, servants, or agents shall violate any of the provisions of the ordinance regulating the production, sale, and distribution of milk and cream or any of the provisions of the act of the Legislature of the State of New Jersey entitled "An act to regulate the production, distribution, and sale of milk and cream," approved March 30, 1914, or other statutory regulations of such sales.

Persons desiring hereafter to commence the business of selling milk or cream in Montclair may make their application at any meeting of the board, but in every such case new applications must be made on the Monday before the second Tuesday of January of each year, as above provided.

LICENSE REQUIRED

No person shall sell or offer for sale in the town of Montclair any milk or cream unless such person has obtained a license from the board of health authorizing him to make such sale. All persons having a license as required by this section shall at all times display such license in a conspicuous manner in the place where the milk and cream is kept for sale or distribution: *Provided*, That when such sale or distribution is

made from a wagon or other vehicle such vehicles shall have displayed on both sides thereof either a metal license tag that will be furnished by the board of health upon application by the proper parties or a painted sign similar in lettering to the license tags furnished by the board and with the proper license number.

No person who is licensed by the board to sell milk or cream in the town of Montclair shall add any dairy to his source of supply without the written permission of the board.¹

Any person who is licensed to sell milk or cream in the town of Montclair shall immediately withdraw from the town any supply upon notification from the board that the producer of such supply has failed or refused to comply with any of the requirements that are or hereafter may be required of milk producers.

No milk shall hereafter be produced, sold, exposed for sale, or delivered within the town of Montclair unless it is produced and handled in accordance with the requirements of this article.

SEC. 2. No person shall hereafter engage in the sale or exposure for sale of milk within the town of Montclair without first having filed with the board of health a true and complete statement of the locality from which all the milk they handle is produced, a complete list of the persons from whom the said milk is purchased, and a complete list of the localities from which ice for cooling purposes is obtained; and if at any time the place at which said milk is produced or the persons from whom the said milk is purchased or the locality from which said ice is obtained be changed the said board shall be notified immediately. On or before the 15th day of June and of December of each year, and at any other time within three days of the receipt of a request therefor, any person engaged in the sale of milk in Montclair shall furnish said board with a complete list of all persons to whom milk is regularly sold.

SEC. 3. All premises whereon milk is produced or handled for sale or distribution in the town of Montclair shall be open to this board for inspection at any time, and owners of cows from which said milk is produced shall permit a veterinarian in the employ of this board to examine said cows at any time.

Such examination shall consist of any efficient and reasonable method that may be used by the said veterinarian to determine whether or not the cows are diseased.

STABLES.

SEC. 4. Cows shall be stabled under light, dry, and well-ventilated conditions, and the stables shall conform in all respects to the requirements hereinafter set forth, viz:

(a) Any portion of a barn used as a cow stable shall be tightly ceiled overhead, shall be entirely partitioned off from the rest of the barn, and shall not be used for the storage of farm utensils nor for any other purpose.

(b) The walls and ceilings of said stables, not otherwise treated in a manner approved by this board, shall be whitewashed at least every six months.

(c) Stables shall have at least 2 square feet of unobstructed window glass per 500 cubic feet of air space, the windows to be arranged so as to light all portions of the stable effectively.

(d) Each cow shall have at least 3 feet in width of floor space when fastened in stanchions, and in all cases where no adequate artificial means of ventilation is provided each animal shall have air space of at least 600 cubic feet. All cow stables shall be well ventilated at all times.

(e) All stables shall be provided with a tight, dry floor, and the manure drops or urine gutters shall be water-tight and shall be thoroughly cleaned at least twice each day.

(f) No manure, garbage, nor other putrescible matter shall be allowed within 100 feet of any cow stable, milk house, or cooling room; and the drainage from said buildings shall be such that no liquid wastes can collect within this distance.

(g) No raw milk or cream shall be sold in the town of Montclair unless it is produced and handled at a farm or dairy that scores at least 80 on the official score card of the United States Bureau of Animal Industry, and no pasteurized milk or cream shall be sold unless it is produced and handled at a farm or dairy that scores at least 70 on said score card.

COWS.

SEC. 5 (a). No milk shall be sold or offered for sale or distributed in the town of Montclair except from cows in good health nor unless the cows from which it is obtained have, within one year, been examined by a veterinarian whose competency is vouched for by the State veterinary association of the State in which the herd is located and a certificate signed by such veterinarian has been filed with the board of health stating the number of cows in each herd that are free from disease. This

¹ Art. 8, sec. 5 (a).

examination shall include the tuberculin test,¹ and charts showing the reaction of each individual cow shall be filed with this board. All cows which react shall be removed from the premises at once if the sale of milk is to continue, and no cows shall be added to a herd until certificates of satisfactory tuberculin tests of said cows have been filed with this board.

Every cow that is tested as required by the provisions of this section and found to be free from disease shall, immediately after such test is completed, be tagged in the following manner by the veterinarian who made the test: *Provided*, That if a cow is already tagged in compliance with this section no retagging will be required if the tag contains a proper serial number. The tag shall be attached to one ear of the cow so that it will be plainly visible and so that it can not be removed unless the ear be torn. The tags shall be serially numbered in a manner approved by the board and shall be of such construction that when once removed they can not be reused. [The board furnishes ear tags without cost to the dairyman.]

Each certificate that is filed as required by the provisions of this section shall state clearly how each cow is tagged, so that any such cow may be identified.

Any person who at any time, whether temporarily or otherwise, has in his herd or on his premises a cow or cows that have not been tagged as outlined above shall be considered as having willfully violated this ordinance and shall be liable to a penalty of \$25 for each cow not so tagged.

The owner of every cow that reacts to the tuberculin test shall notify this board in writing within 72 hours after the test is completed of the disposition that has been made of such reacting cow. The said notification shall also contain the name and address of the person to whom the reacting cow was sold or the name and address of the person by whom said cow was slaughtered.

Every herd in which more than one reactor is found to every 15 cows shall be retested at the end of six months in the manner hereinbefore provided for making tuberculin tests, and the records of such tests shall be filed with the board of health as required in the case of annual tests.

Every person who is licensed by the board to sell milk or cream in the town of Montclair shall file, or cause to be filed, with the board of health, within 72 hours after the completion of a tuberculin test of any cow in a herd from which his supply is obtained, a chart showing full details of such tuberculin test, and such chart, to be accepted by the board, must show that temperature readings were made at least every two hours from the tenth to the twentieth hour after the cow was injected with tuberculin; and whenever at the twentieth hour a rising temperature is being recorded, additional temperatures must be taken and recorded until a definite reaction is established or the temperature of the cow drops to normal. The chart must also state the name of the manufacturer of the tuberculin used, the amount used, and the hour of injection. If the cow has been previously tested within a period of four months, or if the herd on the previous test showed a large percentage of tuberculous animals or of animals with a suspicious temperature, the amount of tuberculin used and the hours of reading temperatures shall conform to the best practice in such cases.

Every cow that has been admitted to the State of New Jersey within three months and added to a herd from which milk is produced for sale in Montclair must be retested not less than 60 days and not more than 90 days after such admission to the State, and no cow shall be added to a herd unless such cow has been tested to the satisfaction of the board within 3 months.

In addition to the tuberculin tests already required by this section the board may, when in its opinion the number of tuberculous cows found in a herd or the extent of the lesions found in said cows warrants such action, require by resolution that a herd shall be retested, and no raw milk or cream from such a herd shall be sold in the town of Montclair until such a retest is made to the satisfaction of the board: *Provided*, That a five-day notice to make such a retest must be served by the board upon the person who is licensed to sell such milk or cream.

The board may also require that any cow that shows an irregular temperature at the time of a tuberculin test, or that, in the opinion of the board, has not been properly tested, shall be removed from the herd, and no person shall sell in the town of Montclair any raw milk or cream from any such cow until a retest has been made to the satisfaction of the board.

All tuberculin tests required by this section may be made by any regularly qualified veterinarian, unless the board can show cause why tests made by such veterinarian should not be accepted.

¹ The tuberculin test will not be required whenever the board by resolution permits or requires the pasteurization of a supply.

All tuberculin-test charts that are filed with the board must have appended thereto a veterinarian's certificate as to the general health of all nonreacting cows.

No diseased cow or any cow that is in a condition to impair the healthfulness of the milk shall be allowed to remain in any herd from which milk is produced for sale in the town of Montclair.

Every person who is licensed by the board to sell raw milk or raw cream in the town of Montclair shall notify the board, or cause it to be notified, at once of the removal for any reason of any cow from any herd from which his supply is obtained. Such notification shall give the ear-tag number and the reason for the removal from the herd of any such cow, together with the name and address of the person who has just secured possession of the cow, in case such cow did not die or was not slaughtered on the premises. No Montclair board of health ear tag shall be removed for any reason from any cow while such cow remains in the possession of a dairyman who produces milk or cream that is sold in Montclair, and no cow that has been removed from a herd shall be returned to the herd without the knowledge of the board. When a cow is returned to a herd after calving, the board shall be notified of the date of parturition.

No person shall sell any pasteurized milk or cream within the town of Montclair unless a certificate signed by a regularly qualified veterinarian has been filed with the board within six months for every herd from which such supply is obtained. Such certificate must state that the said veterinarian has personally examined every cow in the herd, and it must also state the number of healthy cows found and the number of diseased cows found, with the nature and extent of the disease in each case and the disposition that has been made of such diseased cows.

(b) Cows shall at all times be kept in a clean condition, and the udders shall be washed or wiped with a clean, damp cloth immediately before milking.

(c) No milk shall be obtained from any cow which has calved within 10 days or from any cow within 30 days before the normal time of calving.

(d) All milk shall be obtained from cows fed and watered under the following conditions: All food given to such cows shall be sweet and wholesome. The use of either distillery slops or fermented brewery grains is prohibited, and their presence on any dairy premises will be considered sufficient cause for the exclusion of the milk from such dairies from sale or delivery in said town. Water supplied to cows shall be pure and free from all contamination from stable or household wastes, and no spring or shallow well in or adjoining any stable yard shall be used for watering said cows.

EMPLOYEES.

SEC. 6. (a) All milkers and all other attendants handling milk in any dairy shall be personally clean. When entering upon their duties connected with the dairy their hands and outer garments must be clean.

If at any time any person or persons having any connection with a dairy, or with the handling of milk, or any resident member of the family of any person so connected, shall be stricken with cholera, smallpox, diphtheria, membranous croup, typhus, typhoid or scarlet fever, measles, tuberculosis, syphilis, or any other communicable disease that may hereafter be declared by this board to be dangerous to the public health, notice shall be given to said board immediately by the owner or owners of such dairies, and said board may order the sale of such milk discontinued for such time as it deems necessary. No milk produced from the dairy of any person failing to give notice shall hereafter be sold or exposed for sale or delivered in the town of Montclair until special permission therefor has been granted by said board.

All persons, including milkers, who come in contact with milk or cream before it is sealed in the final container must be free from all communicable diseases as shown by a medical examination made every three months, and no person shall sell any milk or cream in the town of Montclair until a certificate, signed by a regularly licensed physician, who is approved by the board, that such persons have been examined by the said physician within 30 days and show no evidence of any communicable disease, has been filed with the board of health. Such examinations shall include any tests that the board may by resolution prescribe. Like certificates shall be filed with the board of health on the 1st day of January, April, July, and October of each year based upon examinations that have been made of all such persons during the previous month: *Provided*, That such certificates will not be required for those persons who handle milk and cream that are to be pasteurized. Additional certificates must be filed for new employees as soon as they begin their duties. All certificates must be on forms furnished by the board and must give the name of every person examined.

UTENSILS AND METHODS.

(b) Utensils used for the collection and transportation of milk shall, before being used, be thoroughly washed with pure water and soda or soap, or by some other approved means, and then *sterilized by steam*.

(c) As soon as milk is drawn from a cow, and before straining, it must be removed from the stable to a separate room, where it shall be strained immediately. It shall then, within 45 minutes of the time of milking, and in a building separate from the said stable, be cooled to 50° F., or below, by some method approved by this board. The above-mentioned cooling room shall be properly ventilated and lighted, shall be used for no other purpose than that indicated above, shall at all times be kept in a clean condition, and shall not be connected with any stable, barn, or dwelling.

(d) All milk shall be delivered in bottles, but no milk in partially filled bottles shall be sold or offered for sale. No tickets shall be used in connection with the sale or delivery of milk. No bottles shall be filled, capped, or recapped outside the dairy building regularly used for this purpose, and said bottling room shall at all times be kept in a clean and sanitary condition. Milk bottles shall be used for no other purpose than as receptacles for milk.

No person shall remove milk bottles from a building wherein a disease dangerous to the public health exists, or has existed, until he has first obtained permission in writing from the board of health.¹

All rooms in which milk or cream is pasteurized or bottled and all rooms in which milk utensils are washed or sterilized shall be provided with a smooth, well-drained, nonabsorbent floor. Such rooms shall at all times be clean and light and shall be effectively screened between the 1st day of April and November of each year.

MILK.

Sec. 7. (a) Samples of milk shall be furnished this board by any producer or dealer at any time upon proper payment therefor.

(b) No raw milk shall be sold, offered for sale, or delivered in the town of Montclair unless at least 80 per cent of the samples, as shown by analyses made by or for the board, contain less than 100,000 bacteria per cubic centimeter: *Provided*, That no action will be taken to exclude any supply unless at least two samples taken on different days are found to contain more than 100,000 bacteria per cubic centimeter.

No pasteurized milk that contains over 10,000 bacteria per cubic centimeter shall be sold or offered for sale or delivered in the town of Montclair.

No milk or cream that contains any appreciable amount of sediment or foreign matter shall be sold, offered for sale, or delivered in the town of Montclair, regardless of whether or not the bacteria count exceeds the limit set by this section. "Appreciable amount of sediment" shall be construed to mean anything more than a few minute particles in a quart of milk.

(c) The board of health may, from time to time, when in its opinion the public interest may require, permit by resolution the sale of milk that is produced under conditions other than as herein specified: *Provided*, That such milk is pasteurized by subjecting it to a temperature of 150° F. for 20 minutes, or by an equivalent process.

The board of health may, when in its opinion the public health requires such action, require by resolution that any milk or cream supply shall be pasteurized under the supervision of the board, and no person shall sell any such supply after he has been notified by the board to pasteurize it unless such supply is pasteurized under the supervision of the board: *Provided*, That such supply may be sold without pasteurization after the board by resolution decides that the necessity for such pasteurization no longer exists.²

No person [who is licensed by the board to sell milk or cream] shall at any time pasteurize his supply or permit any part of it to be pasteurized without the written permission of the board, nor shall any dealer at any time sell as raw milk or cream, without the written permission of the board, any supply that he has been authorized or directed by the board to pasteurize.²

No pasteurized milk shall be sold in the town of Montclair unless it is conspicuously labeled "Pasteurized." Said label shall also state the degree (temperature and length of exposure at that temperature) and date of pasteurization.

(d) No substance or compound shall be added to any milk which is to be exposed or offered for sale, and no substance shall be subtracted therefrom.

¹ Art. 10, sec. 4.

² Art. 8, sec. 5 (a).

(e) No milk shall be sold in Montclair which is obtained from a dealer who handles in part a supply not approved by this board; and no person shall deliver or offer for sale in the town of Montclair any milk unless the entire supply which he handles complies with the requirements hereinbefore set forth, unless satisfactory evidence is given this board that the two supplies are kept separate.

No milk or cream shall be sold in the town of Montclair if it is handled or stored at a milk station, dairy, or distributing station at which a milk or cream supply not approved by the board and not contained in a final container which is plainly labeled with the source of the supply is handled or stored.

No milk or cream shall be sold in the town of Montclair unless the container in which it is delivered has plainly marked thereon the name of either the producer or the vender of the milk or cream, and in case a license to sell milk or cream is granted to a dealer who handles separately more than one supply, such container shall in addition have marked thereon the source of the supply. No false or misleading statement or mark shall appear upon any container or be attached thereto.

(f) No milk shall be delivered, stored, or transported at a temperature exceeding 50° F.

No milk shall be sold from any store unless said store has adequate facilities for keeping said milk at a temperature below 50° F., and no milk shall be stored or sold at a temperature higher than 50° F. All milk shall be kept and delivered in the original bottles.¹

(g) No ice which is obtained from a source which is contaminated or which is so situated that it may become contaminated shall be used for cooling milk.

Any person who violates any of the regulations above set forth shall, upon conviction thereof, forfeit and pay a penalty of \$25 for each offense.

¹ Art. 7, sec. 8.

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
5 CENTS PER COPY

▽

33-2270-33.5

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, CHIEF

ADMINISTRATION OF CHILD
LABOR LAWS

PART I
EMPLOYMENT CERTIFICATE SYSTEM
CONNECTICUT

By

HELEN L. SUMNER and ETHEL E. HANKS

2

INDUSTRIAL SERIES No. 2, Part I
Bureau Publication No. 12



WASHINGTON
GOVERNMENT PRINTING OFFICE
1915

PUBLICATIONS OF THE CHILDREN'S BUREAU

Annual Reports:

First Annual Report of the Chief, Children's Bureau, to the Secretary of Labor for the fiscal year ended June 30, 1913. 20 pp. 1914.

Second Annual Report of the Chief, Children's Bureau, to the Secretary of Labor for the fiscal year ended June 30, 1914. 79 pp. 1914.

Care of Children Series:

No. 1. Prenatal Care, by Mrs. May West. 41 pp. 3d ed. 1913. Bureau publication No. 4.

No. 2. Infant Care, by Mrs. May West. 87 pp. 1914. Bureau publication No. 5.

Dependent, Defective, and Delinquent Children Series:

No. 1. Laws relating to Mothers' Pensions in the United States, Territories, and New Zealand. 163 pp. 1914. Bureau publication No. 7.

Infant Mortality Series:

No. 1. Baby-saving Campaign: A preliminary report on what Americans are doing to prevent infant mortality. 33 pp. 4th ed. 1914. Bureau publication No. 3.

No. 2. New Zealand Society for the Health of Women and Children: An outline of the methods of baby-saving work in small towns and rural districts. 1914. Bureau publication No. 6.

No. 3. Infant Mortality: Results of a field study in Johnstown, Pa., based on births in one calendar year, by Emma Duke. 83 pp. and 9 pls. 1914. Bureau publication No. 9.

No. 4. Infant Mortality in Montclair, N. J.: A study of infant mortality in a suburban community. 38 pp. 1915. Bureau publication No. 11.

Industrial Series:

No. 1. Child Labor Legislation in the United States. — pp. 1915. Bureau publication No. 10.

No. 2. Administration of Child Labor Laws.

Part 1. Employment Certificate System, in Connecticut. 89 pp. 1914. Bureau publication No. 12.

Miscellaneous Series:

No. 1. The Children's Bureau: A circular containing the text of the organizing the bureau and a brief outline of the plans for immediate work. 6 pp. 1912. Bureau publication No. 1.

No. 2. Birth Registration: An aid in preserving the lives and rights of children. 29 pp. 6d ed. 1914. Bureau publication No. 2.

No. 3. Handbook of Federal Statistics of Children: Number of children in United States, with their sex, age, race, nativity, parentage, and economic distribution. 106 pp. 2d ed. 1914. Bureau publication No. 8.

U. S. DEPARTMENT OF LABOR

CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

ADMINISTRATION OF CHILD LABOR LAWS

PART I EMPLOYMENT CERTIFICATE SYSTEM CONNECTICUT

By

HELEN L. SUMNER and ETHEL E. HANKS



INDUSTRIAL SERIES No. 2, Part I
Bureau Publication No. 12



WASHINGTON
GOVERNMENT PRINTING OFFICE
1915

Harvard College Library
July 17, 1915
from the
United States Government.

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
10 CENTS PER COPY

▽

CONTENTS.

	Page.
Letter of transmittal.....	5
Administrative agencies and their functions (chart).....	Follows page 5
Introduction.....	7-12
Method of securing employment certificates (chart).....	Faces page 12
Method of securing certificates.....	12-19
Original regular certificates.....	13-17
Subsequent regular certificates.....	17
Summer-vacation certificates.....	18
Lost certificates.....	19
Statements of age.....	19
Evidence of age.....	19-21
Physical requirements.....	21
Educational requirements.....	22-25
Evening-school attendance.....	25
Enforcement.....	25-26
Keeping children in school.....	26
School census.....	27-30
Applicants for certificates.....	30
Unemployed children.....	31-33
Inspection.....	34, 35
Summary.....	36
Records.....	36-38
State records.....	37
Hartford district records.....	37
Local records kept by State agents outside of Hartford district.....	37
Conclusion.....	38-52
Method of securing certificates.....	39
Evidence of age.....	39
Educational requirements.....	40
Physical requirements.....	41
Enforcement.....	42-46
Unemployed children.....	46-48
Relation to other child labor laws.....	48-50
Centralization and records.....	50-52
Appendix.....	53-69
Laws relating to employment certificates.....	53-56
Forms used in the administration of employment certificate laws.....	56-68

NCIES

OF EDUC

ETARY

1941
1942
1943

Special of

NCIES

OF EDU

ETARY

stant
gents
clerks

pecial age



ADMINISTRATION OF THE EMPLOYMENT CERTIFICATE SYSTEM IN CONNECTICUT.

INTRODUCTION.

In Connecticut the administration of the employment certificate system is centralized in the State board of education. Agents of the State board not only issue all certificates but perform all the work of inspection of establishments for violation of the law. The factory inspection department—which in most States inspects establishments for children under age or working without certificates, and which even in Connecticut is charged with the duty of enforcing all laws relating to hours, labor conditions, and employments prohibited for children—has no legal authority whatever in regard to the minimum age and employment certificate law. This act, indeed, is considered almost solely as a provision of the compulsory education law, under which children from 14 to 16 years of age who have already received a certain degree of education may leave school on condition that they go to work.

A law which went into effect in September, 1911,¹ provides that no child under 14 years of age shall be employed in a manufacturing, mechanical, or mercantile establishment, and that no child under 16 years of age shall be so employed unless the employer has obtained a certificate signed by the secretary or an agent of the State board of education or by some other school officer "designated by said board." This certificate must give the date of the child's birth, must show that he is over 14 years of age, and must state that he is "able to read with facility, to legibly write simple sentences, and to perform operations of the fundamental rules of arithmetic with relation both to whole numbers and to fractions," and that he does not appear to be physically unfit for employment.

In addition to this regular employment certificate a temporary or vacation certificate permitting employment during summer vacation is authorized by an act of 1913² for "any child in good physical condition, between 14 and 16 years of age, on application in person to the secretary or an agent of the State board of education." No educational qualifications are requisite to obtain this vacation certificate.

¹ Acts of 1911, ch. 119. For the text of this act see p. 56.

² Acts of 1913, ch. 211. For the text of this act see p. 56.

These acts are supplemented by the compulsory school-attendance law, which provides that children over 7 and under 16 years of age must attend regularly a public day school or receive regularly during the hours the public school is in session thorough instruction in the studies taught in the public schools, except that children over 14 years of age are exempt from school attendance "while lawfully employed at labor at home or elsewhere."¹

In a study of the employment certificate system these laws of 1911 and 1913 and the compulsory school laws are the only legislative enactments which are of importance. Connecticut has, however, other laws relating to child labor which are enforced by the State factory inspector. Most conspicuous among these are the law prohibiting employment under 16 years of age in certain dangerous trades² and the law limiting the hours of labor of minors under 16 to 10 a day and 55 a week in manufacturing establishments and to 58 a week, except at Christmas time, in mercantile establishments and prohibiting employment of minors under 16 in manufacturing or mercantile establishments after 6 p. m. or in mercantile establishments after 6 p. m. on more than one day a week, except at Christmas time, or after 10 p. m. at any time.³ But as the only connection between these laws and the employment certificate system lies in the fact that employment certificates constitute evidence of age, they are not considered in this study, which relates exclusively to the administration of the employment certificate system.

As for the application of the employment certificate act, though the law mentions only manufacturing, mechanical, and mercantile establishments, the State board of education has interpreted it broadly and requires employment certificates of children employed in all sorts of establishments, in offices and bowling alleys, or with wagons, or by telegraph or other messenger companies—in fact, of practically all child laborers except newsboys and children employed in agricultural pursuits and in domestic service. Though this interpretation has never been subjected to legal test, the State board of education has had the favorable opinion of attorneys upon this broad interpretation of the law. It should be noted that this interpretation is not based entirely upon the wording of the employment certificate act, for the requirement that children working during school hours in any occupation shall have certificates may be considered as an administrative regulation in the enforcement of the compulsory education law, which exempts children between 14 and 16 years of age from school attendance if they are "lawfully" employed, regardless of occupation.

¹ General Statutes, revised edition, 1902, sec. 2116. For the text of this section and others relating to its enforcement see pp. 53, 54.

² Acts of 1911, ch. 123.

³ Acts of 1909, ch. 220, as amended by Acts of 1913, ch. 179.

Employment certificates are made out to a particular employer and are good only in his hands. They can not be obtained, therefore, until the child has a position promised, and they must be renewed whenever the child changes employers.

Certificates must be signed, according to law, "by the secretary or an agent of the State board of education or by a school supervisor, school superintendent, or supervising principal or acting school visitor designated by such board." The State board has exercised this power by designating only its own agents to issue certificates. In the smaller towns and villages, however, there are 34 school supervisors, also appointed by the State board of education though their functions are similar to those of county superintendents in other States, who assist by passing upon documents presented by children and parents in application for certificates and by filling out "information cards" and sending them to the nearest agent, who makes out the certificates and mails them back to the parents and employers. But these supervisors assist in issuing only a few certificates, and none of the other persons mentioned in the law have, in fact, any part in the procedure except as they furnish transcripts of school records to children.

The law further provides that employers must keep certificates on file and must show them with lists of the children under 16 employed "to the secretary or an agent of the State board of education when demanded during the usual business hours." Thus the inspection as well as the issuing of certificates is placed in the hands of these agents.

The secretary of the State board of education and six agents bear the main burden of administering the law. Two State attendance officers, however, assist the agents as needed during busy seasons, and from time to time additional persons are employed for periods of from one to six months in special canvasses of the larger towns and cities. The two State attendance officers when assigned to the duty of issuing certificates and of enforcing the certificate law have exactly the same powers and duties as the State agents appointed for that purpose. The secretary of the State board has also an assistant, who has the power of an agent, and there are two clerks, one of whom performs the actual work of issuing certificates in the Hartford office while the other spends half of each day in Bridgeport assisting one agent and the other half in New Haven assisting another agent. In other towns school employees often help the agents in looking up school records and in making out certificates, but not in interviewing parents or children. All clerical assistance of this nature needed by the agents is paid for by the State board of education.

The force concerned with the administration of the employment certificate law, then, consists of the secretary of the State board of education, his assistant, six agents, two clerks, two State attendance officers, temporary canvassers as needed, school supervisors in the

smaller towns and villages, and other school employees for clerical work. None of these persons, however, except the two clerks, are regularly employed exclusively in the administration of the employment certificate law. The secretary and his assistant are concerned with the entire school system of the State and can give only a small part of their time to the subject of employment certificates. The agents, moreover, in addition to their duties in connection with child labor have certain other duties, to be described later, in the enforcement of the compulsory education law.

The secretary of the State board of education and his assistant are in charge of the central office in the capitol building at Hartford, where the records for the entire State are kept, where the correspondence centers, and where uniform instructions to the other agents are formulated. There, too, employment certificates are issued to Hartford children by the clerk assigned to that branch of the work. The inspection of establishments in the Hartford district is usually done by one of the other six agents. Of these six agents one is in Bridgeport five days and in New Milford one day a week; another is in New Haven two whole days and three half days a week, having office hours also at certain hours in half a dozen other near-by places; and the other four have office hours once a week or once a fortnight in a number of different towns. Each agent has a certain district assigned to him and maintains headquarters in some town of his district. The districts are changed from time to time as experience may prove desirable.

All forms used in the administration of the laws are prepared by the State board of education, are uniform throughout the State, and are distributed only by the agents of the State board. All except the blank employment certificates are freely distributed to the children and to the persons who must fill them out. Blank employment certificates, however, are handled only by the agents and their clerks and are not even intrusted to school supervisors.

During the year ended August 1, 1914, there were issued in the State of Connecticut 6,965 original and 6,312 subsequent certificates. Of the originals 658 were vacation certificates. It therefore appears that during this single year an average of two certificates were issued for each child. Assuming that about one-half of the 8,308 children who received certificates during the previous year were not yet 16 at the end of this year, there were probably in force on August 1, 1914, in addition to some 600 or more vacation certificates, about 10,500 regular certificates.

The number of applications rejected is nearly as large as the number of certificates issued. This does not mean, however, that as many children were refused as received certificates, for in the figures relating to applications one child may appear as many times as he

applied during the year. Many of the children, moreover, whose first applications were refused may later have received certificates and so be counted both as having been refused and as having been granted certificates. During the year ended August 1, 1914, 13,051 applications, but probably a considerably smaller number of applicants, were handled, of which 5,458 were rejected. Of the remainder 628 cases were continued into the next year. The following were the causes of rejection, in the order of their importance:¹

Failed on educational test.....	1,910
No evidence of age.....	1,547
No employment.....	1,159
Under 14 years of age.....	598
Over 16 years of age.....	168
Other reasons (housework, farm work, etc.).....	40
Physical condition.....	30
Parent did not appear.....	6
Total.....	5,458

The children who received employment certificates during the year ended August 1, 1914, were distributed as follows:

Counties.	Certificates issued.	Cities and towns in which over 75 certificates were issued.	Certificates issued.
New Haven.....	2,065	New Haven.....	1,033
Fairfield.....	1,736	Waterbury.....	403
Hartford.....	1,438	Meriden.....	301
New London.....	631	Bridgeport.....	294
Windham.....	484	Norwalk.....	273
Litchfield.....	362	Stamford.....	193
Middletown.....	172	Danbury.....	136
Tolland.....	167	Hartford.....	637
	6,065	New Britain.....	297
		Manchester.....	156
		Bristol.....	88
		Norwich.....	267
		Stonington.....	95
		Plainfield.....	134
		Windham (Willimantic).....	114
		Putnam.....	84
		Torrington.....	113
		Middletown.....	97
		Vernon.....	92

The census statistics of child labor in Connecticut in 1910² show 6,141 boys and 4,548 girls, in all 10,689 children 14 and 15 years of age engaged in gainful occupations. There were also 679 children from 10 to 13 years of age at work; of these 254 were newsboys, 84 servants, and about 150 engaged in agricultural pursuits. But nearly 200 appear to have been engaged in occupations which now are and appear then to have been prohibited for children under 14 years of age. Many of these children, however, were probably employed out of school hours. Moreover, the present law was not in

¹ Report of the State Board of Education, 1913-14.

² Thirteenth Census of the United States, 1910, Vol. IV, Population, Occupation Statistics, pp. 442-445.

effect at that time. Of the 10,689 children from 14 to 15 years of age, inclusive, engaged in gainful occupations in Connecticut in 1910, about 1,500 were newsboys or servants or were engaged in agricultural pursuits, leaving only about 9,000 in occupations for which certificates are now required.

If these census figures are even roughly comparable with the figures relating to employment certificates in force, it appears that in 1914 somewhere between 1,000 and 1,500 more children were at work in Connecticut than in 1910. It should be noted, however, that the statistics of the certificated children in 1914 include some children who work only on Saturdays and before or after school hours.

METHOD OF SECURING CERTIFICATES.

Four different kinds of employment certificates are issued in Connecticut: (1) Original regular certificates, (2) subsequent regular certificates, (3) original summer-vacation certificates, and (4) subsequent summer-vacation certificates. A subsequent certificate is merely a copy of an original certificate made out to a new employer. Vacation certificates are good for employment only during the long summer vacations. For work before or after school hours or on Saturdays during the months when the schools are in session, regular employment certificates must be secured exactly as if the children were employed all day and did not attend school. To children over 16 "Statements of age," as they are called, certifying to the fact that such children are past the age when certificates are required are also issued, on request, by the State board of education.

When the present law went into effect, in September, 1911, printed instructions for obtaining employment certificates were issued; but when the edition of these instructions was exhausted it was not considered necessary to reprint them, and for some time none were used. Recently new instructions¹ have been printed and distributed.

In Hartford the office in the State capitol building is open every day from 9 a. m. to 5 p. m. In Bridgeport and in New Haven the offices are in buildings near the business centers, the hours being from 8 a. m. to 12 m. in Bridgeport and from 2 to 4 p. m. in New Haven. In the smaller places the office is usually in a school or a public room, as, for example, the town clerk's office, and the hours are on certain fixed days and may be either inclusive, as from 9 to 11 a. m., or at a set time, as 2 p. m. As the agents are employed throughout the year and are not entitled to even a day's vacation without loss of pay, the hours are the same throughout the year and there is no difficulty in securing certificates when the schools are closed.

¹ Form 27, p. 69.

CHILD API

NAME, ADDRESS
ON INFO

PHYSICAL

DOCUMENTS &
AND AD

ected

authorities

CERTIFICA

Copy given to parent

Copy sent

22200*—15. (To face page 12.)

he goes to school if he is not granted a certificate to work. Th

ORIGINAL REGULAR CERTIFICATES.

In order to obtain an original regular certificate, a child must (1) appear in person, (2) be accompanied by one of his parents or his guardian, (3) bring an "Employment ticket" or other form of promise of employment signed by an employer, (4) present evidence to show the date of his birth, (5) appear to be physically fit for work, and (6) prove either by a school record or by an examination that he meets the educational requirements of the law.

Of these requisites, those directly required by law are the evidence of age and the educational and physical requirements. That the child shall apply in person is indirectly made essential, however, by the provision that he shall not "appear to be physically unfit for employment," as well as by the provision that the issuing officer shall certify to his education. As for the presence of the parent, the law requires that one copy of the certificate shall be "delivered to the parent or guardian," and in order that it may be so delivered the State board of education holds that the parent or guardian must be present. The word guardian is interpreted to mean legal guardian, a ruling which is said to have been effective in preventing boarding-house keepers and other alleged friends or relatives from exploiting children for their wages. If a child under 16 has no parent or legal guardian in this country, he can not get a certificate to work. The requirement that one copy must be "delivered to the employer" is held to imply that the issuing officer must know the name of the employer, and therefore that the child must bring a promise of employment. This ruling resulted from experience of a few cases in which employers returned certificates sent them, stating that they never employed or wished to employ the children named.

In the Hartford office the parents and children are interviewed only by the clerk and in the other offices only by the agent or his clerk. When the child first comes in, whether or not he has with him the requisites for obtaining a certificate, his name and address and all other facts not dependent upon later proceedings are entered on what is called an "Information card."¹ Whether the application for a certificate is granted or refused, the results of the entire proceeding, including the disposition of the case, must ultimately be recorded on this card, which is a permanent office record. No child who applies, therefore, goes away without leaving in the office his name and address, the name of his father and mother, a physical description of himself, and usually other valuable information, such as the name of the school he has been attending and his teacher's name, which can be used by school-attendance officers in following him up to see that he goes to school if he is not granted a certificate to work. This

¹ Form 1, p. 56.

information card serves as a device to assist in the enforcement of the compulsory education law.

If a child appears to be physically unfit for work he may be sent to a physician for examination as soon as the information card is made out or at any later stage of the proceedings. In such case he is given a note to the physician and nothing further is done unless he returns with a signed statement that he is in good physical condition. In case he brings an unfavorable report or fails to return, his application is counted as rejected on account of physical condition. If not sent to a doctor or hospital for treatment he is obliged to return to school. During the year 1913-14 there were 30 such rejections.

A child who has not brought a transcript from a school register¹ showing sufficient schooling to exempt him from further examination on that score is given an educational test.² The amount of schooling required and the character of the educational test will be described later in considering the educational requirements for obtaining certificates. If the child fails to pass the educational test the word "Refused," with the reason for refusal, is written in red ink on the face of his information card, which is filed for future reference. He is then followed up, by a process which will be described later, to see that he returns to school. Failure to pass the educational test is the most common of all causes for the refusal of certificates. As has been seen, the applications of nearly 2,000 children were rejected for this cause alone during the year which ended August 1, 1914.

If, on the other hand, the child fulfills the educational requirements but has failed to bring one of his parents or his guardian, an employment ticket, or evidence of his age, he is sent away with the blank forms which he must have filled out and with exact instructions as to what he must bring before he can get his certificate. A child is not usually sent away for additional papers or for his parent or guardian until he has passed his educational test. The only exception to this rule is in the case of a child who claims to have completed a grade which would exempt him from the test. Such a child, instead of being examined at his first appearance, may be sent away with instructions and with a blank form for the transcript of his school record, together with any other forms which he may need. A child who, after having received such instructions, fails to appear again, like the child who fails to pass the educational test, is followed up to see that he returns to school. An application that is not completed by the child's bringing the parent and producing all necessary documents automatically becomes a refused case at the end of the succeeding month.

The parent or guardian, whether he appears at the first visit or later, is questioned as to his willingness to have the child go to work,

¹ Form 2, p. 56.

² Form 3a, p. 58.

and is urged to allow the child to remain in school. If the parent is unwilling, the certificate is refused; but as unwilling parents naturally do not come to the office, such cases are practically eliminated by the requirement that parents or guardians must be present. When the law went into effect the presence of the parent was not required, and there is therefore no blank space on the information card for this point, but a notation is made at the bottom of the card stating who appeared with the child. There are no exceptions to this requirement.¹ In six cases during the year ended August 1, 1914, applications were rejected because the parents did not appear. The parent or guardian, however, is never obliged to come to the office more than once, even if the child must come back with additional papers.

The board of education provides a blank form, called an employment ticket,² for the employer's statement that if a certain child obtains a legal certificate before a certain date he intends to employ that child. These employment tickets are distributed among employers, and if a child appears at the issuing office without a promise of employment he is given one of the blanks to take to his prospective employer. The use of these forms, however, is not essential. Any similar written statement signed by an employer is accepted. Moreover, if a child appears claiming to have procured work at a certain establishment, but bears no written evidence of the fact, the employer often is called up by telephone. If he confirms the child's statement and if everything else is satisfactory, the certificate is made out, but failure to bring a promise of employment is a frequent cause of failure to procure a certificate. In the year 1913-14, as has been seen, certificates were refused for this reason in 1,159 cases.

It is not necessary in practice to question the authenticity of a promise of employment, as frauds are automatically checked up through the provision of the law, described more fully later on, which requires that employers shall send to the office of the State board at Hartford a notice of commencement of employment. If such a notice is not returned within a reasonable time after the certificate has been issued, the agents of the State board follow up the case. Thus it is impossible for a child by forging or inventing an employer's name to escape from the network of the law.

Lack of evidence of age³ is an even more frequent cause of failure to secure a certificate than is lack of a promise of work. During the year ended August 1, 1914, 1,547 applications were rejected because

¹ One girl, for example, who had appeared repeatedly at the New Haven office stating that her mother was ill in bed and that her father was at work, and who had tried bringing various other persons in their stead, was finally obliged to have her father appear, though he lost his own piece-rate wages while away from his work.

² Form 4, p. 59.

³ Form 5 or 6 or other record, p. 59.

no evidence of age was produced. These figures include all cases in which the children, having been sent away to procure evidence of age, never returned. In 598 cases in which such evidence appears to have been produced the applications were rejected because the children were under 14, and in 168 cases because they were over 16 years of age and therefore needed no certificates.

Second and later visits to the office of the State board of education or to an agent to procure an employment certificate are generally caused by failure to bring the parent or guardian, a promise of employment, or evidence of age. In a few cases, of course, the procedure is delayed by sending the child to a physician for a physical examination, but this is rare. The educational test, given always at the first appearance in case the child does not present a school record from one of the higher grades, separates those who are educationally qualified from those who are not and prevents, for a time at least, second visits to the office of children who are not able to pass the examination. The parent, as has been pointed out, is not obliged to be present more than once, but if he failed to come when the child made his first application he must appear with the child at some later time. If a child has actually secured a position he usually brings his promise of employment, for employers generally understand this requirement; but many children still apply without knowing that they must first secure work. The provisions of the law are becoming better known, however, and often children come to the office for the first time accompanied by their parents and bringing all the necessary documents. In any event the child, after his first appearance, is always sent away, either (1) with his certificate, (2) with a refusal to grant a certificate, (3) with a note to the physician, (4) with all the blank forms necessary to be filled out in his case before a certificate can be granted, or (5) with the blank forms for all other documents and instructions as to securing a birth record.

When a child who does not appear to be physically unfit to work has either passed the educational test or brought a satisfactory transcript of his school record, has produced his parent or guardian, and has brought some form of promise of employment signed by an employer and satisfactory evidence of his age, he is given his certificate.¹

Certificates are issued in triplicate—one copy for the parent, one for the employer, and one for the State board of education. The employer's copy and the State board copy are practically the same, and both contain the name of the employer for whom the child may work, with a caution on the employer's copy that the child named can be lawfully employed only by the employer named. The parent's copy does not contain the name of an employer, but states that it

¹ Form 7, p. 60.

is not good for employment for longer than one week. The text of the law is printed on the back of each copy. The certificate itself contains no description of the child, but the information card gives the color of the hair and eyes, the complexion, and a general statement as to height.

The employer's copy is usually sent by mail, but delay in the child's going to work after he has received a certificate is prevented by allowing him to work for a week on the parent's copy, which is handed directly to the parent or to the child with instructions not to lose it and to come back or notify the agent if he changes employers. In some cases, as in Bridgeport, where the office hours of the agent are in the morning and the child can go immediately to work, he is often given the employer's copy as well as the parent's copy, with instructions to take the former to the employer. Any danger from this procedure is obviated, in the agent's opinion, by the fact that the employer must notify the office of the State board of education in Hartford when the child begins work.

When the employer's copy of the certificate is sent it has attached to it a blank notice of commencement of employment,¹ a blank notice of termination of employment,² and a copy, labeled "Important notice,"³ of the section of the law which makes the employer liable to a fine of not more than \$10 for failure to send these notices promptly to the State board of education. The notice of commencement of employment is yellow; the notice of termination is a vivid red; and in the copy of the legal provision relating to the return of these notices the word "promptly" and the sentence relating to the penalty are underlined in red ink. Commencement and termination notices must be sent by the employer direct to the office of the State board of education at Hartford. If, however, the employment does not end until after the child is 16 years of age, a termination notice is not required.

SUBSEQUENT REGULAR CERTIFICATES.

When a child is discharged or quits work the employer retains his own copy of the certificate. The child, however, while hunting for a new position, may take his parent's copy with him to serve as evidence that he can be legally employed. When he secures work he gives his parent's copy to his employer and may then work a week without any other form of certificate. This gives him ample time in which to obtain a subsequent certificate made out to the new employer.

¹ Form 8, p. 61.

² Form 9, p. 61.

³ Form 10, p. 61.

Application for a subsequent certificate may be made by the parent, by the child, or by the employer; it may be made in person or by mail; and it may be directed either to the agent from whom the original certificate was secured or to the State board of education at Hartford. A blank form ¹ is provided for such application, but its use is not essential. Any similar form of application is as good. As the information cards of all children to whom certificates have been issued by each agent are kept by him, as the State board copies of all certificates issued in the State are on file in the Hartford office, and as instructions concerning cases to be followed up are all issued from Hartford, it makes no difference whether a subsequent certificate is issued by the agent or by the central office.

No formality except a simple request is necessary in order to obtain a subsequent certificate,² which is merely a copy of the original certificate made out, in triplicate as before, to a new employer. Across the face of this certificate is stamped a form to be filled in with the number of the original certificate of which this one is a copy, with the date of issue and with the name of the secretary of the State board of education. It is not necessary that the previous employer shall have sent in a termination notice before a subsequent certificate is issued; nor is it necessary for the child to furnish proof, in the form of a promise of employment, that he has actually secured another position. If the application is made by the parent or child, however, the agent usually assures himself in some way, often by telephoning the employer, that the child really has a position.

The employer's copy of a subsequent certificate, like the employer's copy of an original certificate, is sent to the employer by mail, with commencement and termination notices and a warning to send such notices to the State board of education. The State board copy is filed with the original State board copy in the central office at Hartford. The parent's copy is not usually given to the parent but filed with the employment ticket. If, however, the child brings a much soiled and torn original parent's copy, the new one is given to the child and the old one destroyed. Outside of Hartford the parent's copy of a subsequent certificate, with the name of the employer added, is usually filed with the information card, which itself contains the name of the first employer, so that the agents can always tell where a child is working without applying to the Hartford office.

SUMMER-VACATION CERTIFICATES.

Original and subsequent summer-vacation certificates,³ good for employment only during the long summer vacation of the public schools, are obtained in exactly the same way as original and sub-

¹ Form 11, p. 61.

² Form 12, p. 62.

³ Form 13, p. 63.

sequent regular certificates except that transcripts from the school records are not required and no educational test is given. The certificate plainly states that the child must return to school at the beginning of the fall term. The act governing regular certificates is printed on the back of the summer-vacation certificate form.

LOST CERTIFICATES.

If a child loses his parent's copy of his certificate, he is never given a new one until he changes employers and rarely even then; but the inconvenience caused the child is slight, as the employer for whom he is or has been working does not need a copy of his parent's certificate, and to aid him in finding a new employer the agents usually give him a blank "Employment ticket" which he presents to be filled out. As no proof of the loss of a parent's copy is required, there is nothing to prevent a child from giving his parent's copy to another child, but the other child could not work on it for more than a week unless the employer also was willing to violate the law.

STATEMENTS OF AGE.

For children who are over 16 years of age and therefore do not come under the provisions of the child labor law, the State board of education has undertaken to issue statements¹ which certify that evidence is on file in its office showing that these children are actually over 16 and which name the character of the evidence. These statements, like employment certificates, are issued in triplicate, one copy for the child or parent, one for the employer, and one for the records of the State board. Outside of Hartford the employer's copy is usually kept by the agents themselves.

All that is necessary to obtain a statement of age is for the child to appear at the office with satisfactory evidence of the date of his birth. An information card, stating the character of the evidence, and the three copies of the statement are then made out and signed by the issuing officer. During the year ended August 1, 1914, 846 such statements of age were issued.

EVIDENCE OF AGE.

The law does not specify what may be received as evidence of age in support of an application for an employment certificate. It does specify, however, that the certificate must state the date of birth of the child and must show him to be over 14 years of age, and it provides also that the secretary and the agents of the State board "shall have power to require all statements of fact offered in support of such application to be made under oath" which they may themselves administer.

¹ Form 14, p. 64.

The documents required in practice as evidence of age are as follows: (1) For children born in Connecticut, town clerk's certificates, if obtainable; (2) for children born in other States, copies of birth certificates, if obtainable; (3) for foreign-born children, passports or other documentary evidence of age at arrival in this country, or (4) if passports are not obtainable, foreign birth certificates; (5) for either native or foreign-born children unable to procure any one of the above-named documents, baptismal records; or (6) if no such record can be procured, affidavits of age sworn to by the parents or guardians.

Most of the children now applying for certificates who were born in Connecticut are able to obtain town clerk's certificates of age.¹ Since 1897, when several prosecutions occurred and special efforts were made by the registrars of the larger cities to arouse doctors and midwives to the importance of recording all births, over 90 per cent, it is believed, of the births in Connecticut have been recorded. A town clerk's certificate costs 15 cents, a fee which may seem a hardship to the child who is going to work but is believed to be necessary in order to prevent constant demands from children for certificates to prove that they are old enough to go to moving-picture shows.

If a foreign-born child has a passport or other similar paper, he is not obliged to send for other documentary proof of his age; but if he can not produce such a paper his parent is told to write to the place where he was born for a birth certificate. The agents do not state to whom the child or his parent should write; require no evidence such as a registry receipt that a letter has been written; and demand no proof later, when the child or parent returns claiming that the birth record can not be obtained, that such is actually the case. The Russian Jews particularly complain of the expense of obtaining birth records. Nevertheless, persistence in demanding documentary proof of age from foreigners has been rewarded with considerable success. Foreign papers must be translated if the agent can not read them, but a translation must always be accompanied by the original paper. In Hartford foreign documentary proof of age is usually retained and filed along with other evidence relating to the child. Outside of Hartford such documents are returned to the child or parent. When a foreign document is returned, in order to prevent its fraudulent use later for a younger child of the same family, it is stamped with the date when it was presented at the office of the State board of education or to one of the agents.

While waiting the receipt of a foreign birth record or of a communication stating that it can not be obtained, the child is not allowed to work but must go to school.

Transcripts of school records and entries in family Bibles are not accepted as evidence of age, for such documents are considered to be

¹ Form 5, p. 59.

merely former statements of the parents. When presented they must be accompanied by affidavits of age sworn to by the parents.¹ These parents' affidavits are believed to furnish, in case of need, a better basis of prosecution for false statements than do school or Bible records.

PHYSICAL REQUIREMENTS.

The law provides not only that every employment certificate must state that the child "does not appear to be physically unfit for employment" but that the secretary or an agent of the State board of education or one of the other school authorities authorized to issue certificates "may cause any child to be examined by a reputable physician for the purpose of aiding him in determining whether such child is physically fit for employment, and may charge the expense of such physical examination against the State as a part of his expenses." Under this authority the agent, before granting certificates, sends to a physician for examination such children as he has reason to believe are or may be in bad health. Under the same authority, moreover, children found at work who appear to the agents physically unfit are sometimes sent to a physician and not permitted to resume their employment until they have had a physical examination and have been pronounced in good health. The physicians who handle all such cases are selected by the State board of education.

In the vast majority of cases the physical fitness of a child to go to work is determined by the agent who issues the certificate, and except in extraordinary instances the agent's judgment is based on the child's answers to questions as to whether he has ever been seriously ill or is well at the time of making application. If the facts as stated by the child appear to make it advisable, or if the child looks ill even though he claims to be in good physical condition, he is sent to a physician.

No record is kept of the number of children required to undergo physical examinations, but in 1911-12 only 9 were refused certificates at the Hartford office because of physical unfitness. Twenty-two were refused in 1912-13, all but one of them at the Hartford office, and 30 were refused in 1913-14 in the entire State for this reason.

The physician to whom children are sent fills out no blank form describing the child's condition, but merely writes to the agent that he finds such and such defects or that the child is in good health. If the physician finds any serious defect and states that he believes it would be harmful to the child to work, the child is refused a certificate and, according to the seriousness of the case, is sent to a doctor or a hospital for treatment or back to school. But the agent, not the physician, is the ultimate authority in the disposition of all cases.

¹ Form 6, p. 59.

EDUCATIONAL REQUIREMENTS.

The burden of maintaining the educational standard for children who wish to go to work rests partly upon the State board of education and partly upon the local school visitors, town school committees, or local boards of education. The child labor law provides that in order to obtain an employment certificate a child must be able to read with facility, to write legibly simple sentences, and to perform the operations of the fundamental rules of arithmetic with relation both to whole numbers and to fractions. No school record is required and no school grade which must have been attained is specified. An earlier act,¹ which is still in effect, provides that "whenever the school visitors, town school committee, or board of education of any town or district shall by vote decide or whenever the State board of education shall ascertain that a child over 14 and under 16 years of age has not schooling sufficient to warrant his leaving school to be employed, and shall so notify the parent or guardian in writing," the child must attend school until the parent or guardian has obtained a "leaving certificate" stating that the education of the child is satisfactory either to the local school authorities or, if the notice has been given by the board, to the State board of education, or until the child is 16 years of age.

Under this law a grade standard for leaving school to be employed has been established in many of the smaller towns of Connecticut—25 towns in August, 1914—but not in the larger cities where most of the employment certificates are obtained. Under the rules of the town school committee of Norwalk, for example, no child is permitted to leave school until he has completed the fifth grade. In the other places which have such a requirement children must usually have completed the sixth grade, but in some towns they must have completed the seventh grade.

In granting or refusing certificates, agents of the State board of education not only determine whether or not the child has sufficient education to go to work under the child labor law, but "ascertain" whether or not he has the amount of schooling which has been decided by vote of the local school authorities to warrant his leaving school to be employed. If the child is found lacking under either requirement, the agent notifies the parent and the child must go back to school.

In issuing the certificate the agent satisfies himself as to the child's educational qualifications in one of two ways. He either accepts a transcript from a school register,² signed by the superintendent, principal, or teacher of the school, or gives the child an examination. If a transcript from a school register is accepted in Hartford, it must show that the child has completed the ninth grade and in other

¹ Acts of 1903, ch. 29, as amended by acts of 1905, ch. 36. For the text of this act, see p. 53.

² Form 2, p. 56.

places that he has completed the fifth grade; otherwise an examination is given unless there is a grade requirement for leaving school, when the transcript must show that he has completed that grade. It is generally believed that when children have completed the fifth grade they have a thorough knowledge of fractions, and until the fall of 1913 the Hartford office, as well as the agents outside of Hartford, did not require the educational test for children whose school records showed completion of the fifth grade. At that time, however, it was learned that the mercantile establishments in Hartford wished the children they employed to be better prepared in arithmetic than they were. Thereafter all children in Hartford were given the test except those who had completed the ninth grade. The educational test is not given in towns which have a grade requirement for leaving school, for in all such towns the agents cooperate with the local school authorities by refusing to issue certificates to children who, even though they might satisfy the requirements of the State law, do not meet the local grade standard. Even in other towns children from the fourth and lower grades are usually refused without examination.

Transcripts from school registers are taken in lieu of examination only from Connecticut schools or from approved schools outside of Connecticut. Records from parochial schools in Connecticut are accepted on the same basis as those from public schools. The compulsory education law provides that children attending a private or parochial school must be instructed during the hours and terms that the public schools are in session and in the studies taught in the public schools. The subjects definitely specified as those which children must be taught are reading, writing, spelling, English grammar, geography, arithmetic, and United States history.

School records from foreign countries or even from many States of the Union are not accepted in place of the educational test. If from a school in Massachusetts or New York, however, a school record certifying to the grade completed, made out on the transcript form of the Connecticut State Board of Education and signed by the superintendent, principal, or teacher of the school which the child last attended, is accepted.

It is the custom in Connecticut to promote children twice a year, and in many places the examinations for promotion are checked up in the office of the city superintendent of schools. This method makes it difficult, at least for principals or teachers of public schools, to get rid of troublesome children by promoting them into a grade from which they can get certificates without examination. Under any circumstances, if an agent suspects that a transcript of a school record is fraudulent or has not been honestly issued he may require the child to take the educational test; and during the summer vaca-

tion, when the schools are not in session and children can not get transcripts from school registers, reliance in issuing regular certificates is placed wholly upon office examinations.

Until the fall of 1914 the educational test consisted simply of an examination in arithmetic. The child was required to write his name, his address, the name of the town, and the date at the top of a sheet of paper, and was given half a dozen problems in arithmetic, which he was required to work out on the sheet. These problems were the same for all children and involved, as will be seen by examination of the form ¹ filled out by a child in the Hartford office, both common and decimal fractions. No test was made of the child's ability to read, and the only evidence required of his ability to write was the writing of his name and address and the date at the head of his arithmetic test. The assumption was that if a child had been in school long enough to be able to pass this examination in arithmetic he must also have learned to read and write.

During the fall of 1914 reading and writing tests ² were added. These are much simpler than the test in arithmetic, which is practically the same as before. The reading and writing tests seem adapted to a child who has completed the work of the first grade, whereas the arithmetic examination could hardly be passed by a child who had not completed the work of the fifth grade. In the reading test there are only two words of more than one syllable, and the writing test consists merely of answers to questions as to age, when last at school and what grade, father's name and business, where the child intends to work, the name of the State, and the names of the days of the week. An indefinite time is allowed for the educational test, and if, in the unfamiliar surroundings, the child appears to be nervous or unable to concentrate his attention, he is often allowed several trials.

In order to secure uniformity throughout the State the entire educational test is now printed for use by all agents, but it is changed every month or two.

In this connection attention should be called to the fact that the child labor law does not require ability to read and write in the English language. Unless there is some local regulation to the contrary, children whose education has been entirely in a foreign tongue are entitled to receive employment certificates if they can pass the arithmetic test and can "read with facility" and "legibly write simple sentences" in any language. This fact doubtless accounts for the simplicity of the reading and writing tests as compared with the test given in arithmetic.

Teachers in the regular graded classes often give special assistance to children who wish to pass the educational test and to children who have come back to school after failure to pass it. Agents of the State

¹ Form 3, p. 57.

² Form 3a, p. 58.

board sometimes even tell the children to ask for such help.¹ In some towns, as New Britain and Meriden, the ungraded classes assist backward children to meet the educational test for employment certificates. In at least one instance an agent of the State board, on the advice of the superintendent of schools but much to the disappointment of the teacher, refused certificates to an entire group of backward and slightly defective children trained in an ungraded class, because they did not understand one minor process in arithmetic, though they successfully solved the more difficult problems in which they had been coached. But as the test is printed and the same one is used for some time, it would seem easy for a child to memorize the solutions to the particular problems given and to pass the test without a thorough knowledge of the principles involved.

EVENING-SCHOOL ATTENDANCE.

Until 1911 attendance at evening school was compulsory for all illiterates over 14 and under 16 years of age who were employed in towns where public evening schools were maintained. As this law applied only to children who, under the child labor act of 1911, can not obtain certificates, i. e., to children who are unable to read and write in any language, it was entirely superseded by the latter act so far as children who must have certificates are concerned. At present there is no compulsory evening school attendance in Connecticut. Evening schools are maintained, however, in several towns and are largely attended by foreign-born children as well as by adults.

ENFORCEMENT.

The laws prohibiting the employment of children under 14 and providing that those from 14 to 16 years of age must have employment certificates from the State board of education and be actually at work or attend school are enforced by two methods, first by an elaborate system of following up both children and employers, and second by the inspection of establishments where children are employed. A child between 14 and 16 years of age must be in school unless he is lawfully at work. This dovetailing of the child labor and compulsory education laws means in practice that, during school hours at least, one law is as well enforced as the other. The main element in the enforcement of the certificate law is an elaborate system of following up children in order to enforce the compulsory education law. In this system, as will be seen, the employer checks up violations by the child; the child checks up violations by the

¹ A boy came to the Hartford office, for example, who claimed to have finished the seventh grade and who brought all the necessary papers to procure a certificate. He was exceedingly nervous and, after trying several times, was unable to pass the educational test and was refused a certificate. He was told to ask the teacher to explain to him the more difficult operations and to return and try again in a few weeks.

employer; and the machinery devised for enforcing school attendance automatically and simultaneously enforces the employment certificate law. Inspection is used merely as a means of filling up the loopholes in the system of reports and counter reports which has been devised to keep all children under 14, and all under 16 who are not lawfully employed, in school during the hours and terms that the public schools are in session and to prevent violations during school vacations.

In considering how the methods of enforcing school attendance of children from 14 to 16 years of age work out in practice, two classes of towns or cities and three classes of children must be considered. First, there are the larger towns which have school-attendance officers. In these towns all children except those who have employment certificates are directly under the jurisdiction of the local attendance officers except that these officers may report to the agents or attendance officers of the State board children whom they are unable for any reason to locate—particularly if they suspect that such children may be illegally employed. Second, there are the smaller towns and villages which have no local attendance officers and where the agents and attendance officers of the State board enforce the school attendance of all children.

As for the children, there are, first, children who have been in a public school in Connecticut and do not have employment certificates; second, children who have never been in a public school in Connecticut and do not have employment certificates; and third, children who, whether or not they have been in a public school in Connecticut, have already been given employment certificates. So far as the first two classes of children are concerned the problem is primarily one of the enforcement of the compulsory education law.

KEEPING CHILDREN IN SCHOOL.

In the larger towns children from 7 to 16 years of age who drop out of a public school or are irregular in their attendance are reported to the local attendance officers and are followed up by them. Regardless of the ages of the children, all cases which can not be located are supposed to be reported weekly by these officers to an agent of the State board. This agent later reports back to the local attendance officers the results of his investigations. In the smaller places, where there are no local attendance officers, the superintendents, principals, or teachers send to the State agent in charge of their district monthly reports of unexcused absences and of irregular attendance, and the agent follows up all such cases regardless of the ages of the children.

No child, then, can leave school without being reported to some official whose duty it is to see that he either returns to school or produces some lawful excuse for his absence. The disappearance,

through the family's moving to another town or district, of a child who has once been in a public school is rendered particularly difficult by the fact that the State agents, who are in charge of the unlocated cases of truancy reported by local attendance officers in the larger towns and cities as well as of all cases reported by school authorities in the smaller places, are in constant communication with one another.

Thus if the State agents and the local truant officers have enough time and are conscientious enough to perform their duties thoroughly, it must be practically impossible for a child who has been in a public school in Connecticut to go to work under 14 years of age, or under 16 without an employment certificate. It should be noted, however, that there are only two local attendance officers in New Haven, two in Bridgeport, and one in Hartford.

The agents of the State board of education see that children who have been employed on summer-vacation certificates return to school in the fall and that children of any age who have been placed in private homes by county officers attend school regularly.

Children who have never been in a public school in Connecticut and do not have employment certificates, with whom may be classed the few children who disappear from the school system and can not be located, are of two classes—those who have attended parochial or private schools in Connecticut and those who have come into the State from the outside, either from another State or from abroad. Parochial schools are required by law to keep registers of attendance in the form prescribed by the State board of education for public schools, and these registers must be open during school hours for inspection by the secretary and the agents of the State board. These schools must also make to the State board annual reports¹ which, however, do not include reports of absences from school. In some places parochial schools are cooperating with the State and local authorities by reporting their truancy cases in the same way as public schools, but, in general, they are reluctant to ask for the assistance of public school attendance officers, and such cooperation is entirely voluntary.

SCHOOL CENSUS.

In the case of children who come into Connecticut, either from other States or from abroad, and who do not promptly report at a public school, the principal means of enforcement of the compulsory education law is the annual school census. The primary purpose of this census is to serve as a basis for the apportionment of school funds, though it serves also as a certain check upon parochial school children. Each town or district is entitled to \$2.25 from the State for every child enumerated, and districts within towns are also entitled

¹ General Statutes, revised edition, 1902, sec. 2104.

to city funds, which in Hartford bring the total up to about \$6 for every name listed.

The law directs the enumerators, whenever they find children who are not in school, to "ascertain the reason for such nonattendance and if such persons are employed at labor the names of their employers or of the establishments where they are employed."¹ In many places in the State the school registers are checked up by the enumeration lists to see that all children in school are counted in the enumeration and that all children enumerated are either in school or otherwise accounted for. It is in such places that the census is of the greatest assistance in enforcing the compulsory education and child labor laws; but even in other places, if the enumeration is carefully made, it brings to light the names of children who have come into the State from outside and are not enrolled in any school and tends to prevent such children from going to work illegally.

The annual enumeration covers all children over 4 and under 16 years of age and is made in districts by the school district committee or, if they fail or are unable to do so, by the clerk, and in towns by one or more persons appointed by the town school committee. The law requires that the enumeration shall be made during September and shall show the names and ages of all children, together with the names of their parents or guardians, who belonged to the district or town on the first Tuesday of that month.² Returns are supposed to be made to the school visitors or the town school committee by September 25, and the law provides that if the returns from any district are not in by that time "one of the school visitors or a person duly appointed by the board of school visitors shall make a complete enumeration before the 15th of October." In practice the school census is taken as early as possible in September. It can hardly be begun, however, as early as the first Tuesday, for schools are not yet open at that time and parents and children are often away from home.

No particular qualifications are required for school census enumerators. In districts where the clerk takes the census there is generally greater uniformity in methods from year to year than in towns where political considerations are apt to enter into the appointment of enumerators and where a new set of enumerators is appointed every year. In Hartford and Willimantic, for example, good results are said to be obtained by having the census taken each year by the same enumerators, while in Bridgeport it is stated that the change of enumerators each year has proved a serious handicap in securing complete returns. Nevertheless, in the fact that enumerators are paid

¹ General Statutes, revised edition, 1902, secs. 2252 and 2255, as amended by acts of 1913, ch. 182. For the text of these sections, see p. 54.

² Until 1913 the school census was taken in October.

from 3 to 5 cents for every name there is a strong incentive to secure all the names possible. In some districts enumerators are obliged to hire and pay their own interpreters.

Enumerators are supposed to make a house-to-house canvass. They accept the parent's statement for all information wanted, including whether or not the child is in school and if employed the name of his employer. There is a penalty of \$3 for failure to give the information required,¹ but none for giving false information except a general penalty of \$20 for making a false statement concerning the age of the child "with intent to deceive the town clerk or registrar of births, marriages, and deaths of any town or the teacher of any school."²

Blank forms for the census enumeration are furnished by the State board of education,³ but their use is not obligatory. In most of the larger towns and cities, indeed, they have been found unsuitable because they have no spaces provided for the addresses of the parents or of the children. In many places local forms and methods have been devised.

In Bridgeport, for example, the enumeration is first taken on a pad form,⁴ a separate slip for each family, and the blanks call not only for the present residence but for the residence on October 1 of the previous year. This information is then transferred to a permanent form,⁵ which is filed in a card catalogue and which contains each child's record in parallel columns year by year for the entire period of compulsory school attendance. This system makes it impossible for any child whose true age was recorded when he entered school to skip a year when he is nearing 14 in order to go to work earlier, for a misstatement of age is detected as soon as the information secured in the latest enumeration is transferred to the card containing the record of earlier enumerations.

In most places, owing mainly to the financial incentives offered both to school districts and to enumerators, the school census is believed to be taken with a fair degree of accuracy. New Britain, however, reports that a double method of checking reveals the fact that from 400 to 600 names are omitted each year by the enumerators. In some towns an insufficient number of enumerators are employed. Thus New Britain with its population of about 44,000 can not secure as good results with two enumerators as Willimantic with its population of only 12,000 can secure with three enumerators. For with fewer enumerators either carefulness or rapidity in covering the city must be sacrificed, and both are factors in the accuracy of the census.

¹ General Statutes, revised edition, 1902, sec. 2226.

² General Statutes, revised edition, 1902, sec. 2120. For the text of this section see p. 54.

³ Form 15, p. 65.

⁴ Form 16, p. 66.

⁵ Form 17, p. 66.

Though not always done, it appears to be a general custom to compare the census records with the school registers. Out of the seven cities visited this is done in five—Hartford, Bridgeport, Waterbury, New Britain, and Willimantic. In Bridgeport, as has been seen, the census records of each year are compared with previous census records as well as with lists furnished by the schools. In New Britain, too, there is a double check, as the enumerators' records are not only compared with the school registers but with cards made out in school by the children themselves. This latter method of checking is the one in use in Middletown, where it is considered better than a comparison with the school registers. In Middletown, just previous to the taking of the census, blank cards¹ are distributed in parochial as well as in public schools and are filled out by all the children enrolled. In addition to data concerning the child they ask for information in regard to the child's brothers and sisters, their names and ages, and where they are at work or in school. This latter feature is an additional check, which is valuable to the State agents in discovering cases of illegal employment.

New Haven is the only one of the seven cities visited where no effort is made to compare the school census returns with the names of the children enrolled in school. The superintendent of schools stated, however, that he believed the census, made annually by 10 men, to be practically complete and accurate.

APPLICANTS FOR CERTIFICATES.

Children who have once applied for certificates, whether or not they have been in school in Connecticut and whether or not they get the certificates for which they apply, find themselves caught in another network of reports and counter reports. Among these children are many newcomers in the State who might not otherwise be located until the next census, but who have been sent in to obtain certificates by employers to whom they have applied for work.

Reports of the names of all children who have applied for certificates, with the disposition of each case, are supposed to be made by the agent of the State board to the local school board, the attendance department, or the teacher in the town. Where office hours for issuing certificates are held more often than once a week, as in New Haven and Bridgeport, the reports are made weekly, and in other places they are made after each office period. Reports of pending cases, i. e., of children who have applied but failed to produce their parents or guardians or one or more of the requisite documents, are made monthly. Where the agent's office is in a school building the disposition of each case is checked up on the school records at the

¹ Form 18, p. 66.

time of the child's application. In Hartford, where cooperation with the schools began later than in some of the other cities and is not as thoroughly worked out, the disposition of cases is reported to some of the schools only if the children have brought transcripts from school registers and not if their qualifications have been determined solely by the educational test; but in one school district, where the children are mainly foreign born, this report is made at once.

The school authorities, after being notified that a child has been refused a certificate or has not returned to complete his records, are supposed to report to the agent within one week whether or not the child is in attendance, and within two weeks the agent is expected to inform the secretary of the State board as to the exact whereabouts of the child.

In addition to this system of reporting, if a child is refused a certificate on the ground of insufficient education, an "attendance notice,"¹ which states that the child has not sufficient education to warrant his leaving school to be employed and names the school which he must attend, may be either given or sent to his parent. One of the stubs attached to this attendance-notice form is sent as a memorandum to the State board of education at Hartford and the other is retained by the agent for use in following up the case. Of these notices 559 were sent out by the State agents during the year ended August 1, 1914. There is a penalty of not exceeding \$5 for each week's failure on the part of the parent to send his child to school after having received such a notice.

UNEMPLOYED CHILDREN.

The agents of the State board of education are primarily responsible for the school attendance of children who have received employment certificates but are temporarily unemployed. They are sometimes assisted by local attendance officers. But as soon as a child is reported to the local school authorities as having been granted a certificate to work, his name is removed from the school register. Thereafter he is supposed to be in charge of the State board, and all reports concerning him are handled by the State agents.

Whenever a certificated child is not actually at work he is supposed, under the compulsory education law, to be in school. In order to make it possible to enforce this provision the system of commencement and termination notices already mentioned was made part of the law. And in order to enforce the return of these notices the State board has devised a follow-up system by means of which the child automatically checks up the employer. Thus, if an employer to whom a child has had a certificate made out fails to send in a

¹ Form 19, p. 67.

commencement notice he is sent a form letter¹ together with another blank commencement notice and another copy of the section of the law, with the penalty of \$10 for failure to return commencement and termination notices underlined in red ink. If he does not respond to this notice, the case is sent to the nearest agent with instructions to investigate. In the same way, if a child applies for a subsequent certificate or an agent of the State board hears in any way that a child has left a certain employer, and if the termination notice in either case has not been received, the previous employer is sent a form letter² requesting him to return at once the termination notice for that child. This also is followed up, if necessary, by an agent's visit. An occasional prosecution, it is evident, would cause the children themselves automatically to force their employers to send in commencement and termination notices. There is said to be much difficulty, however, in persuading prosecuting attorneys to bring action in such cases. Up to August 1, 1914, only one such case had been prosecuted—a test case brought in Hartford, which was thrown out by the supreme court because the State agent had not kept his promise to allow the employer three weeks for the return of the notice.

In regard to the return of termination notices, employers complain that it is often impossible to tell when a child has quit work and therefore impossible to avoid delay in sending the notice to the State board of education. As the child has no interest in the employer's copy of his certificate he is not obliged to ask for its return and the employer can not know, when a child fails to appear, whether he is ill or has found other employment. For this reason some employers keep the parent's copy, as well as their own copy, of each certificate on file, knowing that the child is likely to ask for his parent's copy before leaving. Some of the agents even instruct children to leave their parents' copies with their employers, a procedure which is a protection to the employer but perhaps a handicap to the child in seeking a better position.

If a child does not apply for a new certificate within a short time after a termination notice has been received at the office of the State board in Hartford, a return postal card³ is sent to his parent asking where he is employed, or, if not employed, where he is attending school. This postal card is intended to be sent a week after the termination notice is received, but in practice it is often not sent for several weeks. If no answer is received within two weeks, or if the child is reported to be out of work and not in school, an agent is notified. The agent may either turn the case over to a local attendance officer or go himself to the home and tell the parent that the

¹ Form 20, p. 67.

² Form 21, p. 67.

³ Form 22, p. 68.

child, if not at work, must go to school. Agents are required to report to the State board upon such cases within two weeks after notification. After his first visit to the home the agent generally allows the child a week in which to secure another position.

The provision that unemployed children must go back to school is the most difficult part of the law to enforce. In the first place it is entirely dependent upon the sending in by employers of termination notices. If the employer fails to send this notice the child may be either unemployed and not in school or illegally employed for months unless he is accidentally discovered. In Hartford the vocational counselor employed by the vocational guidance committee, a private organization, assists in locating such cases and reporting them to the State board. At one time the counselor found in three months some 50 cases in which employers had failed to send in termination notices. The offenders were warned, and since that time employers are said to have been much more careful about sending these notices promptly.

A second reason for the difficulty in getting unemployed children back to school is that no provision is made in the schools for profitably utilizing their time. In some places these children are put in ungraded classes, but as they have already passed the educational test for a certificate this provision does not by any means fill their needs. Where in the absence of ungraded classes they are put back into the regular grades their condition is even more unsatisfactory, for they find themselves in a lower grade than they would have been if they had remained in school and at the same time in the company of children who are in many ways less mature than themselves. The difficulty involved in such association, as well as the difficulty of teaching these children in the regular grades, which they may enter or leave at any time of the year, serves to make unemployed children undesirable pupils from the teacher's standpoint.

Recognizing the lack of opportunity in the schools and the lack of welcome there, the agents of the State board of education, instead of attempting to send unemployed children back to school, often attempt to find new positions for them. Moreover, if a family is known to need a child's earnings the agent may even help him to get his first position. In either case the agent usually calls up an employer and recommends the child or sends the child to an establishment which he knows to be in need of help. A blank form¹ has recently been prepared for agents' records of children who are in need of work.

¹ Form 28, p. 60.

INSPECTION.

The inspection of establishments for certificated children, like the issuing of certificates and the following up of unemployed children, is done by agents of the State board of education. The regular factory inspectors, as has been pointed out, have no duties in connection with the enforcement of the law relating to employment certificates, and any assistance they may render is purely voluntary. They do aid, to a limited extent, by reporting cases of "suspects" or of certificates on file in establishments where the children are not working. But they have no legal right to ask to see employment certificates and do not often see them.

The agents of the State board of education, on the other hand, have the power to demand the production of certificates for children under 16, together with lists of such children, but have no legal power to go through an establishment to see whether the children at work there are all on the list. The employer is liable to a fine of not more than \$100 for neglect to keep certificates and show them to the agents of the State board, but he can, if he wishes, forbid the agents to enter his workrooms. In practice, it is said, this is not a serious limitation of power, as in only two cases have employers ever refused to allow agents to go through their establishments.

A more serious limitation of power appears to lie in the fact that agents can not prosecute directly, but can only report violations of the law to the State's attorney for the district, who uses his own judgment about bringing cases into court. Nevertheless, during the year ended August 1, 1914, there were 29 prosecutions for illegal employment. The penalty in such cases is a fine of not more than \$100.

The only regular inspectors of the State board of education are the six agents who visit establishments in their districts whenever they are not occupied in keeping office hours to issue certificates or in work connected with the enforcement of the compulsory education law. In addition to inspections made by regular agents special canvasses are made at irregular intervals in the larger towns. During these canvasses all the regular agents and several additional ones are turned into a single district. During 1912-13 eight additional agents were employed, most of them for only a month or two, but some of them for three months. The number of towns canvassed during the year ended August 1, 1914, was 14, and the number of establishments inspected was 937. The State board, however, has a list of about 7,500 establishments in the State in which children under 16 years of age are employed.

The procedure of inspection is very simple. In a small establishment the agent secures the certificates at the office and then goes through the workrooms. Whenever he sees a child who appears to be under 16 he asks his name and looks for his certificate. If it is

found, the agent makes no further inquiry; if not found, he asks the child's age and address and the name of the school last attended. Later he ascertains the correct age of the child from the school or from the files in his own office. Whenever he finds a child who appears to be certainly under 16 years of age working without a certificate he instructs the foreman or employer to cease employing the child until the correct age is established and tells the child to come to his office with proof of age. If the agent does not find a child for every certificate on file, he makes inquiry at the office as to the missing children, and if he finds that a child has been dismissed and no termination notice sent to the State board he requires the employer to make out the termination notice before he leaves the premises. The agent also instructs employers to take no risks when in doubt as to the ages of children applying for work without employment certificates, but to send them to his office for statements of age. The agent makes no inquiry as to hours, character of work, or labor conditions.

In a large establishment the agent generally makes his tour of the workrooms without the certificates, but speaks to and writes down the names of all the children who appear to be under 16 years of age. Later he compares the names and the certificates in the main office. Sometimes the employer summons all the children together and the agent checks them up by the certificates. By this method, however, it is impossible for the agent to detect the child who is not 16 years of age but who because claiming to be is not told by the employer to appear, and for this reason he usually makes a tour of the establishment. In all other respects the procedure is exactly the same as in small establishments.

Whenever an agent inspects an establishment he records the results on a card,¹ which gives, in addition to the name and address of the firm, the business in which it is engaged, the name of the superintendent, the number of hands employed, the number of girls and boys between 14 and 16 years of age, the number working without certificates, and the number employed under 14 years of age. The agent keeps this card, but the information is transferred to another blank,² which is sent to the State board at Hartford. This latter blank, it should be noted, is now filled out only in part, as its questions were made to fit inspections under the old law and cover some questions, such as those relating to hours and wages, which the agent can not now legally ask. The agent also keeps a list of inspections as a guide to future work, and the State board makes up, from the reports which it receives, a record of the history of inspections³ by establishments. This last form, it is said, has not proved entirely satisfactory, as it does not show on what date the information was gathered and has to be supplemented by notes on the back.

¹ Form 23, p. 68.

² Form 24, p. 68.

³ Form 25, p. 68.

SUMMARY.

To sum up, the principal duties of the agents of the State board of education, who are primarily responsible for the enforcement of the employment certificate law, are (1) to issue certificates; (2) to inspect manufacturing, mechanical, and mercantile establishments in their own districts and see whether certificates are on file; (3) to assist from time to time in special canvasses of their own or other districts; (4) to report to the State's attorney and to act as prosecuting witnesses in cases of violation of law, whether by employers or parents; (5) to follow up employers who fail to send in commencement or termination notices; (6) to follow up in large towns all children from 7 to 16 years of age who have dropped out of school or who, having applied and not been given certificates, can not be located by the local attendance officers; (7) to follow up in small towns all children from 7 to 16 years of age who have dropped out of school or have applied and not been given certificates; (8) to follow up children of school age who are not in school but have been located by the annual school census; (9) to see that children who have been employed on summer-vacation certificates return to school in the fall; (10) to report to school boards, superintendents, or teachers the names of children who have applied for certificates, with the disposition of each case; and (11) to follow up children who have been employed but are out of work.

The agents make monthly reports ¹ of the number of towns visited, the number and kind of establishments inspected and the results, the number of special cases investigated, the number of applications for certificates, the number of certificates issued and refused, the number of notices to attend school and of statements of age issued, the number and the results of prosecutions, the number of copies of certificates (subsequent certificates) issued, the number of letters written, and the number of days occupied in issuing certificates. From these reports the State board can make out monthly statements for the entire State. The agents also have monthly meetings in Hartford, when they compare notes, discuss doubtful cases, and receive instructions.

RECORDS.

The records kept of the administration of the employment certificate law are of three classes—those relating to the State as a whole, those relating to the Hartford district, and those relating to districts outside of Hartford. Both the State and the local Hartford records are kept in the State capitol building at Hartford, and the local records of other districts are kept in the offices of the State agents for those districts.

These records are as follows:

¹ Form 26, p 69.

STATE RECORDS.

1. Alphabetical file of State board copies of all certificates in force in the State, each certificate accompanied by commencement and termination notices and subsequent certificates for that child. (Forms 7, 8, 9, 12, pp. 60, 61, 62.)
2. Similar file of expired certificates and of statements of age. (Form 14, p. 64.)
3. Similar file of vacation certificates. (Form 13, p. 63.)
4. Correspondence file of form letters to employers, parents, etc., and other correspondence. (Forms 20, 21, 22, pp. 67, 68.)
5. Memoranda of attendance notices given parents of children refused certificates, pasted in books by months. (Form 19, p. 67.)
6. File of agents' reports of inspections. (Form 24, p. 68.)
7. Historical records of inspections of each establishment. (Form 25, p. 68.)
8. Monthly reports of State agents. (Form 26, p. 69.)

HARTFORD DISTRICT RECORDS.

1. Alphabetical file of information cards for all applicants, including both those refused and those granted certificates, and also information cards for children over 16 who have received statements of age. (Form 1, p. 56.)
2. Alphabetical file of evidence of all kinds warranting the refusal or the granting of certificates, including evidence of age, examination papers, transcripts of school records, and employment tickets. (Forms 2, 3, 3a, (back), 4, 5, pp. 56, 57, 58, 59.)
3. Information cards for continued or pending cases. (Form 1, p. 56.)
4. Memoranda of agents' reports of inspections. (Form 23, p. 68.) In Hartford the duplicate memoranda of attendance notices (Form 19) are sometimes destroyed and are sometimes given to a State agent or to the local attendance officer. Parents' copies of subsequent certificates (Form 12) are either destroyed or exchanged; in the latter case the old parent's copy is destroyed. Employers' copies of statements of age (Form 14) are sent to the employers.

LOCAL RECORDS KEPT BY STATE AGENTS OUTSIDE OF HARTFORD DISTRICT.

1. Alphabetical file of information cards for children granted certificates, parents' copies of subsequent certificates with the names of the employers inserted by the agents, and employers' copies of statements of age for children over 16, together with information cards for such children. (Forms 1, 12, 14, pp. 56, 62, 64.)
2. Alphabetical file of information cards for children refused certificates. (Form 1, p. 56.)

... as evidence of age,
... back, pp. 56, 57,
... tickets are
... (Form 19, p. 67.)
... p. 56.
... p. 68.)
... small towns—

... employment
... these
... points
... of pro-
... education
... This
... place-
... of the
... children
... alone
... are
... mandatory
... words
... practice
... agent
... usually

... employment
... ward
... makes
... gov-
... well.
... think
... school
... person
... under
... words
... over
... law
... and
... does

are practically the only functions of the enforcement system which are not performed under the direct unifying supervision of the State board of education.

METHOD OF SECURING CERTIFICATES.

In spite of the fact that instead of definitely giving children the right to demand certificates the law gives the secretary and agents of the State board of education the power to issue them, the necessary procedure for obtaining certificates seems to involve almost as little hardship to children as is consistent with the proper protection of their interests which is the main purpose of the law. Though there may seem to be some hardship in the rigid requirement that one of the parents must be present in person, his presence is required only once, and experience, it is claimed, has demonstrated that this is desirable.

That the child shall bring a promise of employment is essential if an employment certificate is to be in reality what its name implies and not merely a permit to leave school for any purpose whatever. If a child has actually secured a position this requirement does not commonly make necessary a second trip to the agent's office before getting a certificate, for employers generally understand that they must give the child such a promise, and any signed statement of the kind is accepted. On the other hand, if the child has no position promised this requirement prevents him from getting out of school merely to roam the streets. In any event the child goes away from the first interview with full instructions as to what he must bring next time in order to secure a certificate.

The procedure of obtaining a subsequent certificate, or a copy of the original certificate for a new employer, is as simple as it could well be made. The child, the parent, or the employer may apply in person or by letter or postal card, and without further formalities the copy is sent. Inconvenience to the child in securing a new position and going to work at once is obviated by the fact that, pending receipt of a copy reading to his new employer, he may work for a week on the authority of the parent's copy of his original certificate.

EVIDENCE OF AGE.

The evidence of age required seems fairly conclusive, though it might be improved in some cases if the agents knew and gave positive instructions as to the official from whom foreign-born children could secure copies of their birth records. If this were done and proof, such as a receipt for a registered letter, were produced at the office showing that the parent had actually attempted to obtain such a record, it might be possible in cases where the child appeared to be certainly over 14 years of age to relax somewhat the requirement that a child must wait weeks on foreign mails before getting his employment cer-

3. Alphabetical file of all documents accepted as evidence of age, and of examination papers. (Forms 2, 3, 3a, 3a (back), pp. 56, 57, 58, 59.) Transcripts of school records and employment tickets are destroyed from time to time.

4. Duplicate memoranda of attendance notices. (Form 19, p. 67.)

5. Information cards for continued cases. (Form 1, p. 56.)

6. Memoranda of agents' reports of inspections. (Form 23, p. 68.)

7. List of inspections—kept in a book.

8. Teachers' attendance reports for all children in small towns—kept until unexcused absences have been investigated.

CONCLUSION.

The most striking features of the administration of the employment certificate system in Connecticut are its centralization and its consequent uniformity in procedure. The law is short and on many points, such as the evidence of age to be accepted, specifies no details of procedure; but it is so drafted as to give the State board of education power to make rules and regulations relating to these details. This is done not by any formal delegation of authority, but simply by placing the whole matter in the hands of the secretary and agents of the State board who, though they can not issue certificates to children who do not meet the requirements laid down in the law, are alone responsible for determining whether or not these requirements are met. The law does not make the issuing of certificates mandatory upon the secretary and agents of the State board. In other words, the child is not given the right to demand a certificate upon producing certain documents, but before issuing the certificate the agent must be satisfied of the truth of the facts to which he personally certifies.

This shifting of emphasis from the child's right to an employment certificate to the power of the secretary and agents of the State board to use their discretion under the law in issuing such certificates makes it possible to establish a uniform system of rules and regulations governing details which in many States are specified in the law itself. Such rules and regulations could not be enforced if local officials issued the certificates without central control, and such a method of issuing them under a law of this kind would lead to wide differences in actual standards throughout the State; but this possible danger appears to be entirely obviated by the fact that the State board is able to keep the issuing of certificates entirely in the hands of its own agents, over whom it has complete control.

Similar uniformity exists in most of the methods by which the law is enforced. The taking of the school census and the following up of the truants from school in places where there are local truant officers

are practically the only functions of the enforcement system which are not performed under the direct unifying supervision of the State board of education.

METHOD OF SECURING CERTIFICATES.

In spite of the fact that instead of definitely giving children the right to demand certificates the law gives the secretary and agents of the State board of education the power to issue them, the necessary procedure for obtaining certificates seems to involve almost as little hardship to children as is consistent with the proper protection of their interests which is the main purpose of the law. Though there may seem to be some hardship in the rigid requirement that one of the parents must be present in person, his presence is required only once, and experience, it is claimed, has demonstrated that this is desirable.

That the child shall bring a promise of employment is essential if an employment certificate is to be in reality what its name implies and not merely a permit to leave school for any purpose whatever. If a child has actually secured a position this requirement does not commonly make necessary a second trip to the agent's office before getting a certificate, for employers generally understand that they must give the child such a promise, and any signed statement of the kind is accepted. On the other hand, if the child has no position promised this requirement prevents him from getting out of school merely to roam the streets. In any event the child goes away from the first interview with full instructions as to what he must bring next time in order to secure a certificate.

The procedure of obtaining a subsequent certificate, or a copy of the original certificate for a new employer, is as simple as it could well be made. The child, the parent, or the employer may apply in person or by letter or postal card, and without further formalities the copy is sent. Inconvenience to the child in securing a new position and going to work at once is obviated by the fact that, pending receipt of a copy reading to his new employer, he may work for a week on the authority of the parent's copy of his original certificate.

EVIDENCE OF AGE.

The evidence of age required seems fairly conclusive, though it might be improved in some cases if the agents knew and gave positive instructions as to the official from whom foreign-born children could secure copies of their birth records. If this were done and proof, such as a receipt for a registered letter, were produced at the office showing that the parent had actually attempted to obtain such a record, it might be possible in cases where the child appeared to be certainly over 14 years of age to relax somewhat the requirement that a child must wait weeks on foreign mails before getting his employment cer-

tificate. Whether or not it seemed best to relax this rule, birth registration, it is well known, is more complete in most European countries than in the United States, and copies of birth certificates can very generally be obtained for foreign-born children, provided application is made to the proper official and the regular fee is sent. Often, however, parents know neither to whom they should write nor the amount of money to send, and if left undirected they sometimes write to relatives and sometimes, even if they write to the proper official, fail to send the fee. As a result many children for whom transcripts of birth records could have been secured, if application accompanied by the requisite fee had been made to the proper official, must finally secure certificates with no better evidence of age than they first produced. In these cases the effort of sending to the foreign country and the delay of waiting for a reply are so much labor and time lost.

EDUCATIONAL REQUIREMENTS.

The educational standard required to obtain a certificate is practically completion of the fifth grade—not a very high standard for 14-year-old children. Even this standard is lowered by three facts:

First. The reading and the writing tests are so much simpler than the arithmetic test that special coaching in the latter subject may enable a child who has not in other subjects a fifth-grade education to obtain a certificate. These children and perhaps others, if examined a year later and after having been out of school for several months, might not be able to pass the test; but no such examination is given.

Second. Fifth-grade school records are accepted in lieu of the test in practically all cities and towns, except Hartford, where large numbers of children are employed, and teachers or principals who wish to get rid of backward or troublesome children may therefore be able to promote them out of school into industry. In Hartford the ninth-grade requirement seems to make this kind of promotion difficult, for in city schools the collusion of several teachers would be required to push a child who could not pass a fifth-grade examination up through the ninth grade. In many other places this is practically impossible, it is claimed, as promotions are made twice a year as the result of examinations which are checked up in the office of the superintendent of schools. No such check is placed upon private schools, and the State board of education itself uses no method of detecting unearned promotions. The records of applicants might be examined; but this would be a laborious process as compared with the simple expedient of requiring every child to take an educational test regardless of the grade in school—a procedure which is unquestionably authorized by the law.

Third. Another fact which tends to lower the educational standard is the failure of the law itself to require ability to read and write English. The theory upon which it is attempted to justify this omission is that it must be made easy for a foreign-born child to obtain a certificate, or else he will go to work without any legal protection whatever. However, the problem of registering the foreign-born child either in school or in the certificate office has to be met in any event, for probably a majority of these children have not received sufficient education in their own language to pass the arithmetic test. This test is said to keep many foreign-born children in school until they are 16 years of age, while American children, unless mentally defective, can generally go to work at 14 if they wish. Certainly an unenforceable provision of law is undesirable; but it does not seem impossible to devise methods of enforcing a law which would require a knowledge of the language of their adopted country by young wage earners.

No provision is made in the law for the exemption of mentally defective children from the educational requirements. If unable to finish the grade requirement or pass the educational test these children must stay in school until they are 16 years of age, even though they may be unable to make any progress in the subjects taught.

PHYSICAL REQUIREMENTS.

The physical standard, however, is in practice the weakest feature of the employment certificate system. Just how many children are required to undergo a physical examination is not known, but during the year ended August 1, 1914, only 30 children out of over 13,000 applicants were refused certificates on account of their physical condition. As no child is sent to a physician unless the agent has good reason to believe him physically unfit for work, it is safe to assume that the physician's verdict is unfavorable in the great majority of such cases and that the number examined is not much greater than the number rejected by physicians. How many of the nearly 7,000 children who were given certificates might also have been refused if a physician had had a chance to examine them is, of course, problematical; but so many physical defects—for example, heart disease—are not obvious to the casual interviewer that it seems certain that a considerable number of children under 16 years of age who are not physically fit to go to work are annually granted employment certificates.

This fact does not appear to be necessarily due to any defect in the law itself. The law does not make a physical examination an absolute requirement for a certificate, but it does provide that the agent who issues certificates may require any child to have a physical examination made by a reputable physician and may charge the

expense of such examination to the State. The child need not appear to be nor need the agent have any reason to believe that he is in bad health. If the appropriation were sufficient to cover the cost, there seems no reason why the State board could not instruct its agents to require every child applying for an employment certificate to bring a certificate of health from a reputable physician. By exercising their discretion in the matter of charging the expense of these examinations to the State the agents might even cause practically all children applying for certificates to be examined by physicians appointed by the State board for that purpose. There might be such opposition to this course that it would be better for the legislature to strengthen the hands of the State board of education by making a physical examination mandatory; but the board appears already to have the necessary powers.

ENFORCEMENT.

The enforcement of the requirement that children must have certificates before they can go to work, like the enforcement of the requirements for obtaining certificates, is in the hands of the State board of education and is therefore practically uniform throughout the State. The principal methods are the same as those used in the enforcement of the compulsory education law. By means of reports and counter reports children who have been in school in Connecticut are caught both going and coming, for they are followed up if they leave school and they are followed up if they apply for employment certificates.

The success of this system depends entirely upon the accuracy and promptness with which the various officials make their reports. Nevertheless, the method of following up children who have been in the public schools of Connecticut to see that they do not go to work without certificates is well devised and is probably, in general, well executed. But any system which is primarily intended to enforce school attendance is likely to insure only that children are not at work during school hours. What they may be doing outside of school hours only thorough and unexpected inspections of all establishments, whether or not they are believed to employ children, could determine. Violations of the law, it is said, frequently occur in small establishments where work is somewhat irregular and children are employed before or after school or on Saturdays.

A much more difficult problem is the prevention of illegal employment of children who have never been in the public schools of Connecticut, and in meeting this problem certain weaknesses in the system of enforcement are apparent. The duties, for example, both of local attendance officers and of agents of the State board of education are the same for private as for public school children. Private

schools, however, can not be required to report illegal absences, and they frequently fail to do so. The truant officers therefore are not armed with the information necessary to enforce the school attendance of children who belong in these schools. The power to pick up on the street or elsewhere the rare child who is not sufficiently "knowing" to avoid meeting such a well-known character as the truant officer is the most rudimentary form of administrative authority, and even this does not reach the working child unless the truant officer constitutes himself an industrial inspector. Lack of complete cooperation with parochial schools is one of the principal sources of weakness in the working out of the system through which the employment certificate law is enforced.

Another method of detecting children who have not been in school is the annual school census, which is designed primarily to serve as a basis for the distribution of school funds and secondarily to assist in the enforcement of the compulsory education law, but is also of assistance in preventing illegal employment. The school census, however, is a local matter, and neither the best method of taking it nor the best method of utilizing it when taken have as yet been worked out for the State as a whole. In some places it is very inaccurate, and in others, even if accurate, it is never checked up with the names on the school registers. Often, indeed, the financial purpose of the enumeration of school children is allowed to obscure the more distinctly human purpose. Though theoretically the school census fills a gap in the methods of enforcing the certificate law, in practice it fills that gap only in certain places where the enumeration is carefully taken and every child enumerated is accounted for as in school or legally at work.

There is nothing except the comparatively weak inspection system to prevent children who have never been in school from being illegally employed for a part or even the whole year between school census periods, provided they can find work, but their chances of finding work are decidedly less than those of children with certificates, because in general if an employer has any children with certificates he usually has some simple method of handling his end of the certificate system, and as he usually can get plenty of children with certificates he does not care to run the risk of employing children without them. Some of the prominent manufacturers of the State complain that small employers are not prosecuted for such violations of law, but that if a single child working without a certificate is found in a large factory suit is immediately brought against the employer. One reason for this may be that the large employer is always presumed to be fully cognizant of the law, whereas the small employer is given the benefit of the doubt. However that may be, the fact that during the year ended August 1, 1914, 846 statements of age were issued to children

over 16 serves to show the care employers are taking to make certain that the law is obeyed. Nevertheless, children under 16 without certificates often find work in small establishments, such as bowling alleys, grocery stores, small bakeries, and other similar places, and occasionally by misrepresenting their ages they obtain work in large establishments. If these children become 16 years of age before the next school census they escape entirely the protection of the certificate system.

The fact that employers so generally insist that children secure either employment certificates or statements of age sets into operation another method of following up children who have not been in school; for the name and address of every child who makes inquiry in regard to employment certificates are taken down, and thereafter that child is followed up to see that he is either in school or at work.

Industrial inspection, which in most States is the principal method of enforcing employment certificate laws, in Connecticut is generally considered to be the least important part of the duties of the agents of the State board of education. As employment certificates are practically always sent by mail and as in other ways the agents deal directly with the employers and not indirectly through the children, each agent, if he were careful, could know in advance of an inspection exactly what children were working legally in an establishment; and as children have practically no chance to give away or sell certificates without being caught it is of little, if any, importance that the certificate contains no means, such as a signature or a physical description, of identifying the child. These inspections are of value, however, in finding children who claim and may appear to be over 16 years of age and in educating employers to greater care in regard to such suspicious cases. But in order to accomplish this purpose the inspector must make a tour of the premises, and this, as has been seen, he does not always do.

The fact that when a child stops work for an employer that employer retains the employment certificate opens another possible loophole. It is difficult to see anything but respect for and fear of the law which could prevent an employer with a certificate on file for Rosie Jones, who has left his employ and is either idle or employed elsewhere, from rechristening some child whose name is not recorded among those to be followed up by the school authorities and employing her on Rosie's certificate. If Rosie is employed elsewhere she has doubtless obtained a copy of her certificate for her new employer, but even then it is impossible for the agent to know every child in his district or to go over all his records before making an inspection. If he consulted his own records he would see at once that Rosie was no longer employed in that establishment, but if he trusts to the certificates handed him by the employer Rosie appears

to be there and he can not be expected to remember anything to the contrary. Such cases may happen rarely, but this loophole could easily be closed by requiring the employer to return his copy of the child's certificate with his termination notice.

The agents often do not have enough time left from their other duties for thorough inspections, and the special canvasses probably do comparatively little good in discovering willful violations, for, even if the time of such a canvass is not known in advance, the information that it is going on must be widely distributed within a few days after it has begun—in plenty of time for most of the children illegally employed either to go to the office and get certificates, or if they can not get certificates to be sent home until the canvass is over and they can return to work with impunity. Violations are found during these canvasses, but not in sufficient numbers to justify the expense and trouble.

Even if the State agents made no effort to enforce the compulsory education law as it concerns unemployed children, they appear to be at present overburdened with work; for wherever there are no local truant officers these agents must enforce the compulsory education law for all children, regardless of age, and in some places this duty throws a heavy burden upon the State agent. Middletown, for example, a city of about 12,000 population, has no local attendance officer, and most of the agent's time is needed for work directly connected with the enforcement of the child labor law. The superintendent of schools can therefore expect little of him when he is notified of a case of truancy beyond a letter to the parent. In other places the local truant officers are even more overburdened than the State agents, but the system is so devised that the child labor law can not be well enforced unless the compulsory education law is well enforced. If children are allowed to drop out of school without being followed up, inspection to supplement the follow-up system is all the more needed, and usually lack of time to follow up the truant means also lack of time to inspect establishments.

As for children who have received employment certificates, the follow-up system is supposed, first, to prevent a child who has a certificate from working for a new employer without obtaining a new certificate, and, second, to send a child who is out of work back to school. The cooperation of a considerable number of persons is required, and that the system does not always accomplish the first purpose is illustrated by the following case: Early in the summer of 1913 a regular certificate was granted to a boy to work for a certain milkman. In July the milkman sent a termination notice to the State board of education. No application was made for a subsequent certificate, and a postal card sent to the parent was not answered. The agent in that district was notified, and he reported the case to a

local attendance officer. Thus far the system worked. But the attendance officer did not report back to the agent and the agent did not report back to the board, and it was January, 1914, before it was discovered, in going through the files of the main office at Hartford, that the boy had never been accounted for. A postal card was immediately sent to his father and the boy promptly appeared at the agent's office and announced that he had been working at a local foundry for some six months on his parent's certificate. The system had thus broken down because the local attendance officer had failed to make a report to the agent, the agent had failed to demand such a report, and the State office had failed to demand a report of the agent.

UNEMPLOYED CHILDREN.

The only point at which the system breaks down seriously, however, appears to be in returning unemployed children to school. It is admitted practically everywhere that at best there is great delay about returning them, and that, in fact, it is not done to any considerable extent. The reasons are as follows: First, employers are careless about sending termination notices promptly. Sometimes they do not know whether the child has quit work or is sick, and sometimes the first notification that the certificate office has that a child has left one employer is when he applies for a copy of his certificate for a new employer. Second, there is also delay while the State board of education sends a postal card to the parent asking what the child is doing, waits for a reply, and then if none comes notifies the agent in that district. Third, the State agents visit only once or twice a week many places where a considerable number of children are employed, and often when they come they have time to do little more than keep their office hours for the issuing of certificates and move on to the next town.

If the children are really to be kept in school when not employed, it would seem that the procedure of getting them in school on termination of employment must be simplified so as to avoid delay. Supposing the employer always sends the termination notice, he may not do so until perhaps a week after the child has quit work. Another week or 10 days must be allowed for transmission of the termination notice to the office of the State board and for preparing and sending out the postal card to the child's parent. Two weeks are then allowed for a reply. Again the machinery is put in motion and the agent receives his notice to look up the case. If the agent is busy, as he generally must be under present conditions, or if he is not at the time in the city where the child lives, he could hardly visit the child's home within less than another week. Unless the child, then, has meanwhile found another position, he is likely to have been out of

work for some five weeks before the agent finds him. If he then professes to be looking for work, as he is practically sure to do, the agent allows him a sixth week in which to continue his search.

There are ways in which this delay might be greatly reduced. In the first place, employers of children might be required to send in termination notices more promptly, or perhaps whenever a child had been absent from work for two or three days without excuse. Then, instead of the slow process of writing the parent and waiting for a reply, the agent might be notified at once and be required to follow up the case immediately. This process, of course, would necessitate more agents to handle the cases, but more agents would make smaller districts possible, and these smaller districts would have a double advantage, for the agent would be able to visit each place in his district oftener and would become more thoroughly familiar with the children, the employers, and the general employment conditions.

In some towns, where there are local truant officers, the suggestion has been made that in order to avoid delay in getting unemployed children back into school their names be sent to these local officers instead of to the State agent and that the termination notices be sent direct to the local school authorities. It is extremely doubtful, however, whether the truant officers would have any better success than the State agents in dealing with unemployed children, and in many ways more would be lost than gained by such a change, for the advantages of uniformity of administration, particularly those which depend on the close cooperation of the State agents, would be thrown away.

At present, however, the idea is so well established that unemployed children can not be put back into school, that efforts in that direction are generally rather perfunctory, except when the child has been employed only a short time and other conditions are favorable. Even when the agent follows up an unemployed child or meets one idling on the street the child will say that he is looking for a job or that he applies at the factory every morning hoping that he will be taken back. As the agent knows that the child will not go to school if he can possibly help it, that the teachers would find him a nuisance if he did, that he would be given very little if any instruction of practical benefit to him, and that he would escape at the earliest possible moment, he is likely to tell the child to try to find work as soon as possible, and then leave him to his own devices. As a result, unemployed children are on the streets in every part of the State, their numbers varying with the importance of child-employing industries and with the degree of conscientious vigilance exercised by the different agents.

Until some provision is made for giving unemployed children suitable instruction in school, indeed, it is difficult to see how the

problem of getting them into school can be successfully handled either by local truant officers or by agents of the State board of education. The ordinary schools throughout the State are not adapted either to hold the interest of children who have been at work but are temporarily unemployed or to give them the kind of instruction which they need. The child, in short, has every reason for not wishing to go back to school, and little or no chance of deriving any benefit from compliance with the law, while the teacher has every reason for not wishing to have him come back.

The main purpose of the legal requirement that the school authorities shall be notified when a child leaves his employer is to enable the school authorities to enforce the compulsory education law; but, even if unemployed children could in fact be required to attend school, the justice of such a requirement to these children, to the others with whom they must be placed, or to the community is extremely doubtful until some provision has been made for utilizing their time to advantage. Vocational training should doubtless be given them at least part of the time, and compulsory continuation schools which would keep them under some form of instruction every week while they were employed would make the problem easier. But neither vocational nor continuation schools that fail to provide courses which can be begun or ended any day without losing their value can hope to meet the problem of compulsory school attendance for unemployed children.

RELATION TO OTHER CHILD LABOR LAWS.

There are certain obvious disadvantages in having the different child labor laws administered by two entirely separate and distinct departments—the factory-inspection department and the State board of education—and in having two sets of inspectors. Apart from the inconvenience to employers and the expense, this double system compels the factory inspectors, who enforce the laws regulating the hours of labor and prohibiting the employment in dangerous occupations of children under 16, but who have nothing to do with the law providing that such children must have employment certificates, to depend—in determining what persons in a given establishment are subject to the laws which they enforce—upon the wall list of children prepared by the employer. The factory inspector might of course obtain from the State board of education a list of the children employed in the establishment, but this is not done, and even if it were such a list would be no more accurate than the employer's list, for the employer has no reason to omit the name of any child who has a certificate

The result is that whenever the certificate law is violated the hours-of-labor and dangerous-trades laws are or easily may be violated without detection; for when a child under age claims to be over 16 years and secures employment without a certificate the factory inspector as well as the employer is apt to consider that child exempt from the other laws. The inspector may of course demand proof of age in a very suspicious case or report such a case to the State board of education; but by the time an inspector can report a suspected violation of the certificate law to an agent, or an agent a suspected violation under the jurisdiction of the factory-inspection department to the inspector and the proper person can get to the establishment to investigate, the violation may no longer exist. Therefore the tendency created by this divided responsibility is for the factory inspector to rest his work back upon that of the agents of the State board of education and for the latter to shut their eyes to all conditions of labor not under their immediate jurisdiction.

Another result of having these laws administered by different departments is that the opportunity offered by the requirement of a certificate for each separate position to aid in the enforcement of the dangerous-occupations law is lost. In some States the employer must name in his promise of employment the exact occupation in which the child is to be engaged. The office which issues the certificate then approves this occupation, refusing certificates for work which it may consider to come under the prohibition of the dangerous-occupation law. But in Connecticut the State board of education takes no official cognizance whatever of laws which are supposed to be enforced by the department of factory inspection. The employer in his promise of employment does not even name the industry in which the child is to be engaged. The State board may, and probably sometimes does, issue certificates to children upon the basis of a promise of employment in an occupation—unstated but none the less definite in the employer's mind and later in the child's experience—in which the employment of children is illegal.

This latter result of divided responsibility is not, however, essential under the present law, for the provision of the compulsory education law that children from 14 to 16 years of age are exempt from school attendance "while lawfully employed at labor at home or elsewhere" would seem amply to justify the State board of education in requiring that the employer should state in his promise of employment the exact occupation in which the child is to be engaged. Employers do not always know what occupations are legal and what illegal, but if they were required to name the occupation the agent would, if it were illegal, refuse to grant the certificate.

Under the same authority the State board of education might readily extend its work in the direction of ascertaining whether children are in fact "lawfully employed" as regards hours and dangerous occupations; for, though the certificate law gives the board no power over these matters, a child who is working illegal hours or at a prohibited machine is certainly not "lawfully employed" and therefore is not exempt from the compulsory education law, which the State board of education is directed to enforce. If the board is right in its ruling that messenger boys, for example, must have employment certificates, though the law directly requires such certificates only for children in "mechanical, mercantile, or manufacturing establishments," why could it not do more than it does at present to see that children whom it exempts by the certificate system from school attendance are "lawfully employed" as regards both their hours of labor and the character of the occupations in which they are engaged?

As for the lack of power of the factory-inspection department as regards the minimum age and certificate laws, there seems to be no reason why, without lessening the powers or duties of the school authorities, the factory inspector should not have the power and duty of enforcing all child labor laws, those relating to minimum age and certificates as well as those relating to hours and to dangerous occupations. If the factory inspectors were given this additional power, however, they should be required to report the results of their inspections in detail—that is, all children found legally employed as well as those found illegally employed—to the State board of education; for if the State board is to enforce the compulsory education law it must have all available information as to the children who are or may be subject to that law. The factory inspectors would then be much better equipped to enforce the laws relating to hours and to dangerous occupations. At the same time the State board would be better equipped to enforce the compulsory education law. And the inconvenience caused employers by double inspection would certainly be no greater if both State agencies had the power to inspect for all purposes than it is under the present system of inspection by both, each for a different purpose. Indeed it would probably be less, for double inspection would no longer be essential as it is at present.

CENTRALIZATION AND RECORDS.

The two most important points, however, which appear to be clearly indicated by this study of the Connecticut system of administering the employment certificate system are, first, that industrial inspection is only one method of enforcing the law and is probably

destined to decrease in importance as methods of locating and following up children are improved, and, second, that centralization of control over the issuing and the refusing of certificates as well as over inspection tends to efficiency in enforcement as well as to uniformity in standards. Industrial inspection seems to be essential in the absence of a complete and permanent census of all children subject to legal regulation. But it can never be an efficient method of enforcing a child labor law, for children may be here to-day and there to-morrow, and the cost of inspecting all industrial establishments often enough to locate such unstable elements is prohibitory. Therefore the problem of enforcing a child labor law must, like the problem of enforcing a compulsory education law, be approached from the side of the individual child, and school-attendance officers must be authorized to go, at their discretion, wherever children go, even if this power means a certain amount of double inspection of industrial establishments.

If a State child labor law is to be thoroughly enforced, some State agency must keep a record of the whereabouts of every child in the State, whether at school or at work. At present the State Board of Education of Connecticut has, at least theoretically, such a record of all children who are not in school. There are, however, two glaring sources of incompleteness in these records, first, that children engaged in agricultural and domestic pursuits are not included, and, second, that there is no efficient method of registering newcomers to the State. Children are not obliged to have employment certificates to engage in farm and domestic labor. This means not only that children leaving school to go to work in these occupations pass no educational test and are not obliged to fulfill any educational requirements, but also that the names of such children are not in the records of the State board of education. Even if this loophole in the law is not generally known or made use of except in country districts, some record of these children should be kept, it would seem, by the State board in order to prevent their drifting into industrial labor without certificates. As for the registration of newcomers to the State, the school census, even if thoroughly and efficiently handled for that end—which in the absence of any central control is not by any means always the case—is not taken often enough to accomplish the purpose.

The strongest single feature of the Connecticut system and, indeed, the source of most of its other strong features, seems to be the centralization of control over the entire procedure relating to certificates throughout the State in the hands of the State board of education. This centralization is doubtless more necessary as well as easier to attain in Connecticut than it would be in a larger and less densely

populated State; for in Connecticut many towns are so close together that children as well as adults may easily live in one town and work in another, and this is commonly the case. Moving from town to town is also comparatively easy. Local officials, therefore, would have great difficulty in keeping track of children. Through centralized administration, however, substantial uniformity is maintained both in standards and in their enforcement. Every child who obtains an employment certificate in Connecticut passes substantially the same tests of his qualifications, and every child has substantially the same chance of receiving the actual protection of the law.

APPENDIX.

LAWS RELATING TO EMPLOYMENT CERTIFICATES.

EDUCATIONAL REQUIREMENTS.

COMPULSORY SCHOOL ATTENDANCE.

Children from 7 to 16; exemptions from 14 to 16 if lawfully employed.—All parents and those who have the care of children shall bring them up in some lawful and honest employment, and instruct them or cause them to be instructed in reading, writing, spelling, English grammar, geography, arithmetic, and United States history. Every parent or other person having control of a child over seven and under sixteen years of age shall cause such child to attend a public day school regularly during the hours and terms the public school in the district wherein such child resides is in session, or while the school is in session where provision for the instruction of such child is made according to law, unless the parent or person having control of such child can show that the child is elsewhere receiving regularly thorough instruction during said hours and terms in the studies taught in the public schools. Children over fourteen years of age shall not be subject to the requirements of this section while lawfully employed at labor at home or elsewhere; but this provision shall not permit such children to be irregular in attendance at school while they are enrolled as scholars, nor exempt any child who is enrolled as a member of a school from any rule concerning irregularity of attendance which has been enacted or may be enacted by the town school committee, board of school visitors, or board of education, having control of the school. [General Statutes, revision of 1902, section 2116]

Certain children from 14 to 16; penalty.—Whenever the school visitors, town school committee, or board of education of any town, or district shall by vote decide, or whenever the State board of education shall ascertain that a child over fourteen and under sixteen years of age has not schooling sufficient to warrant his leaving school to be employed, and shall so notify the parent or guardian of said child in writing, the parent or guardian of said child shall cause him to attend school regularly during the days and hours that the public school in the district in which said parent or guardian resides is in session, and until the parent or guardian of said child has obtained from said board of school visitors, town school committee, or board of education, or from the State board of education, if the notice shall have been given by the said State board of education, a leaving certificate stating that the education of said child is satisfactory to said visitors, town school committee, or board of education, or to said State board of education, as the case may be: *Provided*, That said parent or guardian shall not be required to cause his child to attend school after the child is sixteen years of age. Each week's failure on the part of a person to comply with the provisions of this section shall be a distinct offense, punishable with a fine not exceeding five dollars, and the provisions of section 2117 [G S r 1902 s 2117] shall be applicable to all proceedings under this act. [Acts of 1903 Chapter 29, as amended by Acts of 1905 Chapter 36]

COMPULSORY EVENING SCHOOL ATTENDANCE.

Illiterate children employed in towns where evening schools exist.—No person over fourteen and under sixteen years of age, who can not read and write, shall be employed in any town where public evening schools are established unless he can produce every school month of twenty days a certificate from the teacher of an evening school showing that he has attended such school eighteen consecutive evenings in the current school month, and is a regular attendant. Every person who shall employ a child contrary to the provisions of this section shall be fined not more than fifty dollars, and the State board of education shall enforce the provisions of this section as provided in section 4707. [G S r 1902 s 2147]

PENALTIES.

Parent, guardian, etc.; exceptions.—Each week's failure on the part of a person to comply with any provision of * * * [section 2116] shall be a distinct offense, punishable with a fine not exceeding five dollars. Said penalty shall not be incurred when it appears that the child is destitute of clothing suitable for attending school, and the parent or person having control of such child is unable to provide such clothing, or its mental or physical condition is such as to render its instruction inexpedient or impracticable. * * * [G S r 1902 s 2117]

Employer.—Every person who shall employ a child under fourteen years of age during the hours while the school which such child should attend is in session, and every person who shall authorize or permit on premises under his control any such child to be so employed, shall be fined not more than twenty dollars for every week in which such child is so employed. [G S r 1902 s 2119]

False statements.—Every parent or other person, having control of a child, who shall make any false statements concerning the age of such child with intent to deceive the town clerk or registrar of births, marriages, and deaths of any town, or the teacher of any school, or shall instruct a child to make any such false statement, shall be fined not more than twenty dollars. [G S r 1902 s 2120]

ENFORCEMENT.

Appointment and duties of agents.—It shall be the duty of the State board of education, and the school visitors, boards of education, and the town school committees to enforce sections 4704, 4705, and 4706 [said sections are superseded by 1911 C 119]; and for that purpose the State board of education may appoint agents, under its supervision and control, for terms of not more than one year, who shall be paid not to exceed five dollars a day for time actually employed and necessary expenses, and whose accounts shall be approved by said board and audited by the comptroller. The agents so appointed may be directed by said board to enforce the provisions of the law requiring the attendance of children at school and to perform any duties necessary or proper for the due execution of the duties and powers of the board. [G S r 1902 s 4707]

Duties of school visitors, etc.—The school visitors or the town school committee in every town shall, once or more in every year, examine into the situation of the children employed in all manufacturing establishments, and ascertain whether all the provisions of this chapter [s 2116-2129] are duly observed, and report all violations thereof to the proper prosecuting authority. [G S r 1902 s 2121]

Regulations of cities and towns concerning truant.—Each city and town may make regulations concerning habitual truants from school and children between the ages of seven and sixteen years wandering about its streets or public places, having no lawful occupation, nor attending school, and growing up in ignorance; and may make such by-laws, respecting such children, as shall conduce to their welfare and to public order, imposing penalties, not exceeding twenty dollars for any one breach thereof. [G S r 1902 s 2122]

Appointment of truant officers; prosecutions.—Every town, and the mayor and alderman of every city, having such by-laws, shall annually appoint three or more persons, who alone shall be authorized to prosecute for violations thereof. All warrants issued upon such prosecutions shall be returnable before any justice of the peace, or judge of the city or police court of the town or city. [G S r 1902 s 2123]

SCHOOL CENSUS.

Enumeration of children in districts; names of employers.—The committee of each school district or, if they fail or are unable to do so, the clerk, shall annually in September ascertain the name and age of every person over four and under sixteen years of age who shall belong to such district, on the first Tuesday of said month, with the names of the parents or guardians of such persons. If any such persons are not attending school during said month of September, then the person making the enumeration shall ascertain the reason for such nonattendance and, if such persons are employed at labor, the names of their employers or of the establishments where they are employed. Returns shall be made to the school visitors of the town to which such district belongs, on or before the twenty-fifth of September; children temporarily residing in one district but having parents or guardians residing in another shall be enumerated only as belonging to the latter district. For making such enumeration the committee or clerk of the district shall receive one dollar, and in addition thereto three cents for each child enumerated in excess of fifty, and the cost of said enumeration shall be paid from the

amount appropriated by the town for the support of schools in said district. If the return of enumeration is not made to the board of school visitors on or before said twenty-fifth of September, one of the school visitors or a person duly appointed by the board of school visitors shall make a complete enumeration before the fifteenth of October next following and return it to said school visitors, and shall receive therefor a sum not to exceed five cents for each child so enumerated. [G S r 1902 s 2252 as amended by 1913 C 182]

Enumeration of children in towns; names of employers.—Town school committees shall annually appoint one or more persons who shall, in September of each year, ascertain the name and age of every person over four and under sixteen years of age who shall belong to such town on the first Tuesday of said month. If any such persons are not attending school during said month of September, then the person making the enumeration shall ascertain the reason for such nonattendance and, if such persons are employed at labor, the names of their employers or of the establishments where they are employed. Returns shall be made to the town school committee on or before the twenty-fifth of September. Said person so appointed shall receive a sum not exceeding five cents for each child so enumerated. Such return shall be signed by the person making it and sworn to substantially according to the form prescribed in section 2253. The town school committee shall examine and correct the returns made to it so that no person shall be enumerated twice or be improperly returned, and lodge them, as corrected, with the town treasurer, and shall transmit to the comptroller, on or before the fifth of December annually, a certificate in which the number of persons shall be inserted in words at full length, which shall be sworn to substantially according to the form prescribed in section 2254. [G S r 1902 s 2255 as amended by 1913 C 182]

MANUFACTURING, MECHANICAL, AND MERCANTILE ESTABLISHMENTS.

MINIMUM AGE.

Employment under 14 prohibited; penalty.—No child under fourteen years of age shall be employed in any mechanical, mercantile, or manufacturing establishment. Every person, whether acting for himself or as agent for another, who shall employ or authorize or permit to be employed any child in violation of the provisions of this section shall be fined not more than one hundred dollars. [1911 C 119 s 1]

EMPLOYMENT CERTIFICATES.

Certificates required from 14 to 16; issued by school authorities; age, school, and health records required; records of issuing office; penalty.—No child under sixteen years of age shall be employed in any mechanical, mercantile, or manufacturing establishment unless the employer of such child shall have first obtained a certificate, signed by the secretary or an agent of the State board of education, or by a school supervisor, school superintendent, supervising principal, or acting school visitor designated by said board, stating the date of the birth of such child, showing that such child is over fourteen years of age, and stating that such child is able to read with facility, to legibly write simple sentences, and to perform the operations of the fundamental rules of arithmetic with relation both to whole numbers and to fractions, and does not appear to be physically unfit for employment. Such certificate shall be in the form prescribed and upon a blank furnished by the State board of education, and shall be issued in triplicate; and one copy thereof shall be delivered to the parent or guardian of such child, one copy shall be delivered to the employer, and one copy shall be deposited in the office of the State board of education. Copies of such certificate shall be obtainable from the State board of education, upon application, at any time. The copy of such certificate delivered to the parent or guardian of the child may be accepted by the employer as a temporary certificate, good for one week, after which time it shall be returned to the parent or guardian of such child. Every person, whether acting for himself or as agent for another, who shall employ or shall authorize or permit to be employed any child in violation of the provisions of this section, shall be fined not more than one hundred dollars. The secretary or the agent of the State board of education or the school supervisor, school superintendent, supervising principal, or acting school visitor to whom application shall be made for a certificate as provided in this section, shall have power to require all statements of fact offered in support of such application to be made under oath, and such oath may be administered by said secretary, or such agent, school supervisor, school superintendent, supervising principal, or acting school visitor, and said secretary, or any such agent, school supervisor, school superintendent, supervising principal, or acting school visitor may cause any child to be examined by a reputable physician, for the purpose of aiding him in

determining whether such child is physically fit for employment, and may charge the expense of such physical examination against the State as a part of his expenses. [1911 C 119 § 2]

Employer to notify State board of education of commencement and termination of employment; penalty.—Every employer receiving a certificate issued under the provisions of this act shall promptly notify the State board of education, in writing, in the form prescribed and upon a blank furnished by said board, of the time of commencement of the employment of any child thereunder and, whenever such employment terminates before such child attains the age of sixteen years, of the time of the termination of such employment. Every person violating any provision of this section shall be fined not more than ten dollars. [1911 C 119 § 3]

Employer to keep certificates and list open to inspection; penalty.—Every employer or other person having control of any establishment or premises where children under sixteen years of age are employed who shall neglect to have and keep on file the certificate described in section 2 of this act or to show the same, with a list of the names of such children so employed, to the secretary or an agent of the State board of education, when demanded during the usual business hours, shall be fined not more than one hundred dollars. [1911 C 119 § 5]

ENFORCEMENT.

Duties and powers of school authorities.—The provisions of section 4707 of the General Statutes [G S r 1902 § 4707] shall be applicable to sections one, two, and three of this act. * * * [1911 C 119 § 6]

VACATION EMPLOYMENT CERTIFICATES.

Vacation certificates may be granted children from 14 to 16; physical requirements.—Any child in good physical condition, between fourteen and sixteen years of age, on application in person to the secretary or an agent of the State board of education for a certificate of employment, shall be granted a temporary or vacation certificate, permitting the employment of said child during the summer vacation. [1913 C 211]

FORMS USED IN THE ADMINISTRATION OF THE EMPLOYMENT CERTIFICATE LAW.

[The words in *italics* are as entered by hand on the blank forms, but all names and addresses, except that of the secretary of the State board of education, are fictitious. Lines enclosed in brackets [] are interpolated and do not appear in the forms as used.]

[Form 1. See p. 13.]

INFORMATION CARD

Town, *Hartford*; date, *December 1, 1913*.
Name of child, *Mary Rausman*.
Post-office address, *Grove Street, No. 94*.
Place of birth, *Russia*; date of birth, *November 17, 1899*.
Name of father, *William*; name of mother, *Sara*.
Evidence of age, *passport and sworn statement of mother*.
Evidence of education, *transcript—passed legal test*.
School, *Henry Barnard*; grade, *V*; teacher, *Miss Mason*. (*Finished fifth grade also in Rochester*.)
Physical condition, *good*.
Hair, *dark brown*; eyes, *brown*; complexion, *medium*; height, *small*.
Certificate —, series *F*, No. *3502*; notice to attend — No. —.
Name of employer, *Brown, Smith & Co.*; address, *Grand Street*.
Mother appeared.

[Form 2. See p. 14.]

TRANSCRIPT FROM REGISTER.

From the register of the *Henry Barnard School*.

It appears that

Mary Rausman

- (1) attended the *Henry Barnard School* from *January 6, 1913*, to *November 27, 1913*;
 - (2) has completed the studies required in said school for the *V* grade;
 - (3) was born in *Russia* on the *17th* day of *November, 1899*;
 - (4) the father's name is *William*, and resides at *Grove (Street), 94 (No.)*.
- Dated at *Hartford*, *November 27, 1913*.

HENRY D. GRAHAM,
Superintendent, principal, or teacher.

[Form 3. See p. 14.]

EMPLOYMENT.

Name, *Mary Reusmen.*
Address, *94 Grove Street.*

Town, *Hartford, Conn.*
Date, *Dec. 1, 1913.*

$$\begin{array}{r} 1.- \quad 324.5 \\ \quad 1.24 \\ \hline 12280 \\ 6480 \\ \hline 3245 \\ \hline 408.380 \end{array}$$

$$\begin{array}{r} 2.- \quad 107.863+ \\ 3.21 \overline{) 345.80} \\ \underline{321} \\ 2480 \\ \underline{2247} \\ 2130 \\ \underline{1926} \\ 2040 \\ \underline{1926} \\ 1140 \\ \underline{963} \\ 177 \\ 3 \overline{) 177} = \frac{59}{107} \end{array}$$

EDUCATION TEST.

$$\begin{array}{l} 3.- \quad \frac{12}{17} \times 3 \frac{4}{10} \times 5 \frac{5}{8} = \\ \quad \frac{9}{12} \times \frac{34}{10} \times \frac{45}{8} = 14 \end{array}$$

$$\begin{array}{r} 4.- \quad 80 \\ \hline 3 \frac{2}{3} \quad 40 \\ \hline 1 \frac{2}{5} \quad 24 \\ \hline 5 \frac{5}{8} \quad 57 \\ \hline \end{array}$$

$$5.- \quad 3 \frac{2}{3} + 3 \frac{2}{9} =$$

$$\frac{11}{3} + \frac{29}{9} = \frac{11}{3} \times \frac{3}{29} = \frac{33}{29} = 1 \frac{4}{29}$$

$$8 \frac{9}{10} - \frac{114}{60} =$$

$$\begin{array}{r} 6.- \quad 1.892 \\ 15.45 \\ 124.1 \\ .0287 \\ \hline 139.4507 \end{array}$$

[Form 3a. See p. 14.]

EMPLOYMENT.

Name, *Peter H. Rosen.*
Address, *3500 Main Street.*

Town, *New Haven.*
Date, *September 17, 1914.*

1.—Add 2345
1684
7321
9999
8008

89357

$$\begin{array}{r} 71 \\ 918 - \\ 74 \\ \hline 2.-\text{Divide } 74 \overline{) 67855} \\ \underline{000} \\ 125 \\ 74 \\ \hline 515 \\ 444 \\ \hline 71 \end{array}$$

8.—Add $\frac{4}{5}$, $3\frac{3}{7}$, $2\frac{5}{8}$

$$\begin{array}{r}
 4 \\
 5 \overline{) 224} \\
 \underline{20} \\
 24 \\
 \underline{20} \\
 4
 \end{array}
 \qquad
 \begin{array}{r}
 224 \\
 180 \\
 \underline{44} \\
 40 \\
 \underline{4} \\
 224
 \end{array}
 \qquad
 \begin{array}{r}
 224 \\
 180 \\
 \underline{44} \\
 40 \\
 \underline{4} \\
 224
 \end{array}$$

4.—Subtract $16\frac{2}{3} - \frac{14}{21}$

$$\begin{array}{r} 16\frac{2}{3} - \frac{14}{21} \\ \underline{} \\ 16\frac{4}{7} - \frac{14}{21} \\ \underline{} \\ 16\frac{10}{21} \end{array}$$

5.—Multiply $12\frac{1}{2}$ by $13\frac{3}{4}$

$$\frac{25}{2} \times \frac{5}{95} \times \frac{1}{10} = \frac{125}{28} = 4\frac{13}{28}$$

6.—Arrange and add:
1.324 374.5 .0267 32.38
and multiply by

1	1.394
15	374.5
2	.0267
	32.38
	408.2307
	15.5
	80411635
	80411635
	4082307
	6387.57685

7.—Multiply 7.001
 .01

 .07001

$$\begin{array}{r} 7001 \\ 8.-\text{Divide } .10 \overline{) 700.1} \end{array}$$

$$9.-5 \times 9 + 20 - 5 + 20 = 3$$

$$5 \times 9 = 45 + 20 = 65 - 5 = 60 \times \frac{1}{20} = 3$$

[Form 8a, back. See p. 14.]

10. How many pints in a quart? *Two.*
11. How many feet in three yards? *Nine.*
12. How many quarts in three pecks? *Twenty-four.*
13. Write
 Age, 14 years 2 months.
 When last at school and what grade? Last June; in high fifth.
 What is your father's name? Louis Regan.
 What is your father's business? Teamster.
 Where do you intend to work? At Back & Jones, box factory.
 What is the name of this State? Connecticut.
 Write the names of the days of the week.
 Sunday.
 Monday.
 Tuesday.
 Wednesday.
 Thursday.
 Friday.
 Saturday.

14. Read:
I have a little shadow
That goes in and out with me
And what can be the use of him
Is more than I can see.

[Form 4. See p. 15.]

Hartford, Conn., November 30, 1913.

To the Secretary State Board of Education.

DEAR SIR:

II Mary Rauerman obtains a legal certificate before December 1, I intend to employ him her.
(date)

BROWN, SMITH & CO.
(Signature of person or company intending to employ.)

[Form 5. See p. 15.]

[SEAL]

Approved by the State board of education.

TOWN CLERK'S CERTIFICATE OF AGE.

THIS CERTIFIES

That it appears on record in this office

that Peter H. Regan was born in New Haven, Connecticut, on the 04 day of July, 1900, and
(name) (town) (State or country)
that his parents' names were Louis Regan and Jane Peterson.
(his or her)

Attest: **FLORENCE SOPRIS,**
Assistant Registrar.

Dated at *New Haven* this *16th* day of *September, 1914.*

[Form 6. See p. 15.]

EMPLOYMENT OF CHILDREN.

Sara Raussman

Makes the following statement:

1. That she was born in Russia.
 2. That she is a resident of the United States and of the State of Connecticut.
 3. That she resides at 24 Grove Street, in the city of Hartford.
 4. That she is the mother of Mary Raussman, and that the said Mary is here present.
 5. That said Mary was born at Russia, on the 17th day of November, 1899.
- (Signed:) SARA RAUSMAN.

State of Connecticut, County of *Hartford*, ss:

On this 1st day of December, 1913, personally appeared the above subscribed and made oath that the above statement is true.

LENORE M. JAMES,
Notary Public.

[FORM 7. See p. 16.]

[The text of the law is printed on the back of each copy.]

For parent; not good for employer longer than one week.

EMPLOYMENT CERTIFICATE.

[SEAL.]

Chapter 119, Public Acts of 1911.

OFFICE OF STATE BOARD OF EDUCATION,
ROOM 42, CAPITOL, HARTFORD, December 1, 1913.

Series No.

THIS CERTIFIES THAT

Mary Reusmen
(name)of *Hartford, Connecticut*,
(town) (State)

- (1) was born at *Russia* on the *17th* day of *November, 1899*, and is over fourteen years of age;
- (2) can read with facility, write simple sentences legibly, and perform the operations of fundamental rules of arithmetic with relation both to whole numbers and fractions;
- (3) does not appear to be physically unfit for employment;
- (4) the address of father is *William, 94 Grove Street*.

(If no father, mother or guardian.)

Signed
(in triplicate.)*CHAS. D. HINE*,
(agent)
Secretary.

----- [Perforated.] -----

The child named below can be lawfully employed only by the employer named in the certificate.

For employer; good only for *Brown, Smith & Co.* (employer).

EMPLOYMENT CERTIFICATE.

[SEAL.]

Chapter 119, Public Acts of 1911.

OFFICE OF STATE BOARD OF EDUCATION,
ROOM 42, CAPITOL, HARTFORD, December 1, 1913.

Series No.

THIS CERTIFIES THAT

Mary Reusmen
(name)of *Hartford, Connecticut*,
(town) (State)

- (1) was born at *Russia* on the *17th* day of *November, 1899*, and is over fourteen years of age;
- (2) can read with facility, write simple sentences legibly, and perform the operations of fundamental rules of arithmetic with relation both to whole numbers and fractions;
- (3) does not appear to be physically unfit for employment;
- (4) the address of father is *William, 94 Grove Street*.

(If no father, mother or guardian.)

Signed
(in triplicate.)*CHAS. D. HINE*,
(agent)
Secretary.

----- [Perforated.] -----

Has obtained employment at *Brown, Smith & Co.*

For the State board of education.

EMPLOYMENT CERTIFICATE.

[SEAL.]

Chapter 119, Public Acts of 1911.

OFFICE OF STATE BOARD OF EDUCATION,
ROOM 42, CAPITOL, HARTFORD, December 1, 1913.

Series No.

THIS CERTIFIES THAT

Mary Reusmen
(name)of *Hartford, Connecticut*,
(town) (State)

- (1) was born at *Russia* on the *17th* day of *November, 1899*, and is over fourteen years of age;
- (2) can read with facility, write simple sentences legibly, and perform the operations of fundamental rules of arithmetic with relation both to whole numbers and fractions;
- (3) does not appear to be physically unfit for employment;
- (4) the address of father is *William, 94 Grove Street*.

(If no father, mother or guardian.)

Signed
(in triplicate.)*CHAS. D. HINE*,
(agent)
Secretary.

EMPLOYMENT CERTIFICATE SYSTEM IN CONNECTICUT. 61

[FORM 8. See p. 17.]

Return at once to State Board of Education, Hartford, Connecticut.

Recd. Dec. 2, 1913.

NOTICE OF COMMENCEMENT OF EMPLOYMENT.

Section 3, chapter 119, Public Acts 1911.

HARTFORD, CONN., December 1, 1913.
(town) (date)

This notifies the State board of education that the employment of *Mary Raushman*, whose certificate number is *F3262*, signed by *Secretary Hine*, commenced on the *1st of December*.
(Signed) *BROWN, SMITH & CO.*
(Firm name.) *C. Y. A.*

[FORM 9. See p. 17.]

NOTICE OF TERMINATION OF EMPLOYMENT.

Section 3, chapter 119, Public Acts 1911.

HARTFORD, CONN., January 3, 1914.
(town) (date)

This notifies the State board of education that the employment of *Mary Raushman*, whose certificate number is *F3262*, signed by *Secretary Hine*, terminated on the *3d of January*.
(Signed) *BROWN, SMITH & CO.*
(Firm name.) *C. Y. A.*

[FORM 10. See p. 17.]

IMPORTANT NOTICE.

Chapter 119, Public Acts of 1911.

SEC. 2. Every employer receiving a certificate issued under the provisions of this act shall promptly notify the State board of education, in writing, in the form prescribed and upon a blank furnished by said board, of the time of commencement of the employment of any child thereunder and, whenever such employment terminates before such child attains the age of sixteen years, of the time of the termination of such employment. Every person violating any provision of this section shall be fined not more than ten dollars.

Blanks are inclosed herewith.

[FORM 11. See p. 18.]

January 7, 1914.

Mr. CHARLES D. HINE, Hartford.

DEAR SIR:

Mary Raushman, whose certificate is series *F*, No. *3262*, asks that a copy be sent to *Rankin & Co.*, where she is now employed.

(Signed) *WILLIAM RAUSMAN*,
(Father.)

[Form 12. See p. 18.]

[The text of the law is printed on the back of each copy.]

For parent; not good for employer longer than one week.

EMPLOYMENT CERTIFICATE.

[SEAL.]

Chapter 119, Public Acts of 1911.

OFFICE OF STATE BOARD OF EDUCATION,
ROOM 42, CAPITOL, HARTFORD, December 1, 1913.

Series F, No. 3262.

THIS CERTIFIES THAT

Mary Reusman
(name)of *Hartford, Connecticut*,
(town) (State)

- (1) was born at *Russia* on the *17th* day of *November, 1899*, and is over 14 years of age;
- (2) can read with facility, write simple sentences legibly, and perform the operations of fundamental rules of arithmetic with relation both to whole numbers and fractions;
- (3) does not appear to be physically unfit for employment;
- (4) the address of father is *William, 94 Grove Street*.
(If no father, mother or guardian.)

Signed *CHAS. D. HINE*,
(in triplicate) (agent)
Secretary.

[Across the face:]

Copy of Series F, No. 3262, issued January 8, 1914. Secretary, Chas. D. Hine.

----- [Perforated.] -----

The child named below can be lawfully employed only by the employer named in the certificate.

For employer; good only for *Rankin & Co.*
(employer).

EMPLOYMENT CERTIFICATE.

[SEAL.]

Chapter 119, Public Acts of 1911.

OFFICE OF STATE BOARD OF EDUCATION,
ROOM 42, CAPITOL, HARTFORD, December 1, 1913.

Series F, No. 3262.

THIS CERTIFIES THAT

Mary Reusman
(name)of *Hartford, Connecticut*,
(town) (State)

- (1) was born at *Russia* on the *17th* day of *November, 1899*, and is over 14 years of age;
- (2) can read with facility, write simple sentences legibly, and perform the operations of fundamental rules of arithmetic with relation both to whole numbers and fractions;
- (3) does not appear to be physically unfit for employment;
- (4) the address of father is *William, 94 Grove Street*.
(If no father, mother or guardian.)

Signed *CHAS. D. HINE*,
(in triplicate) (agent)
Secretary.

[Across the face:]

Copy of Series F, No. 3262, issued January 8, 1914. Secretary Chas. D. Hine.

----- [Perforated.] -----

Has obtained employment at *Rankin & Co.*

For the State board of education.

EMPLOYMENT CERTIFICATE.

[SEAL.]

Chapter 119, Public Acts of 1911.

OFFICE OF STATE BOARD OF EDUCATION,
ROOM 42, CAPITOL, HARTFORD, December 1, 1913.

Series F, No. 3262.

THIS CERTIFIES THAT

Mary Rausman
(name)of *Hartford, Connecticut*,
(town) (State)

- (1) was born at *Russia* on the *17th* day of *November, 1899*, and is over 14 years of age;
- (2) can read with facility, write simple sentences legibly, and perform the operations of fundamental rules of arithmetic with relation both to whole numbers and fractions;
- (3) does not appear to be physically unfit for employment;
- (4) the address of father is *William, 94 Grove Street*.
(If no father, mother or guardian.)

Signed *CHAS. D. HINE*,
(in triplicate) (agent)
Secretary.

[Across the face:]

Copy of Series F, No. 3262, issued January 8, 1914. Secretary, Chas. D. Hine.

[Form 18. See p. 18.]

[The text of the law is printed on the back of each copy.]

SUMMER-VACATION CERTIFICATE—NOTICE TO PARENT.

[SEAL.]

Chapter 211, Public Acts of 1913.

OFFICE OF STATE BOARD OF EDUCATION,
ROOM 42, CAPITOL, HARTFORD, June 23, 1913.

Series F, No. 4964.

To parent of
Arthur Ayres.

You are hereby notified that your child named above must return to school at the beginning of the fall term, September 3, 1913.

THE STATE BOARD OF EDUCATION,
By *CHAS. D. HINE.*
(agent, secretary)

----- [Perforated.] -----

The holder of this certificate must return to school September 3, 1913.

The child named below can be lawfully employed only by the employer named in the certificate.

For employer; good only for *Farragut Foundry.*
(employer)

SUMMER-VACATION EMPLOYMENT CERTIFICATE.

[SEAL.]

Chapter 211, Public Acts of 1913.

OFFICE OF STATE BOARD OF EDUCATION,
ROOM 42, CAPITOL, HARTFORD, June 23, 1913.

Series F, No. 4964.

THIS CERTIFIES THAT

Arthur Ayres
(name)of *Waterbury, Connecticut,*
(town) (State)

- (1) was born at *Newgate*, on the 9th day of *July, 1898*, and is over 14 years of age;
- (2) appears to be in good physical condition;
- (3) the address of father is *Waterbury.*
(If no father, mother or guardian.)

Signed *CHAS. D. HINE.*
(in duplicate) (agent, secretary)

----- [Perforated.] -----

Has obtained employment at *Farragut Foundry.*

For the State board of education.

SUMMER-VACATION EMPLOYMENT CERTIFICATE.

[SEAL.]

Chapter 211, Public Acts of 1913.

OFFICE OF STATE BOARD OF EDUCATION,
ROOM 42, CAPITOL, HARTFORD, June 23, 1913.

Series F, No. 4964.

THIS CERTIFIES THAT

Arthur Ayres
(name)of *Waterbury, Connecticut,*
(town) (State)

- (1) was born at *Newgate*, on the 9th day of *July, 1898*, and is over 14 years of age;
- (2) appears to be in good physical condition;
- (3) the address of father is *Waterbury.*
(If no father, mother or guardian.)

Signed *CHAS. D. HINE.*
(in duplicate) (agent, secretary)

64 EMPLOYMENT CERTIFICATE SYSTEM IN CONNECTICUT.

[FORM 14. See p. 19.]

[One copy is for the child, one for the employer, and one for the State board of education.]

No. 920. [SEAL.] June 11, 1914.
THIS CERTIFIES
That there is evidence on file in this office showing that
Fannie Abbott
(name)
is over sixteen years of age. CHAS. D. HINE,
Agent.
Name of father, James Abbott.
Residence, 368 Highland Avenue.
Character of evidence, town clerk's certificate.

----- [Perforated.] -----

No. 920. [SEAL.] June 11, 1914.
THIS CERTIFIES
That there is evidence on file in this office showing that
Fannie Abbott
(name)
is over sixteen years of age. CHAS. D. HINE,
Agent.
Name of father, James Abbott.
Residence, 368 Highland Avenue.
Character of evidence, town clerk's certificate.

----- [Perforated.] -----

No. 920. [SEAL.] June 11, 1914.
THIS CERTIFIES
That there is evidence on file in this office showing that
Fannie Abbott
(name)
is over sixteen years of age. CHAS. D. HINE,
Agent.
Name of father, James Abbott.
Residence, 368 Highland Avenue.
Character of evidence, town clerk's certificate.

[FORM 15. See p. 29.]

BLANK FORM FOR ENUMERATION.

NB—As many copies as may be necessary are to be distributed to each enumerator by the school board of the town previous to the first day of September.

(General Statutes of Connecticut, revision of 1902.)

Amended by chapter 31, Public Acts of 1907, and chapter 182, Public Acts of 1913.

Section 2252. Enumeration of children in districts. SECTION 1. SECTION 2252 of the General Statutes as amended by section one of chapter 31 of the Public Acts of 1907 is hereby amended to read as follows: The committee of each school district or, if they fail or are unable to do so, the clerk, shall annually in September ascertain the name and age of every person over four and under sixteen years of age who shall belong to such district, on the first Tuesday of said month, with the names of the parents or guardians of such persons. If any such persons are not attending school during said month of September, then the person making the enumeration shall ascertain the reason for such nonattendance and, if such persons are employed at labor, the names of their employers or of the establishments where they are employed. Returns shall be made to the school visitors of the town to which such district belongs, on or before the twenty-fifth of September; children temporarily residing in one district but having parents or guardians residing in another shall be enumerated only as belonging to the latter district. For making such enumeration the committee or clerk of the district shall receive one dollar, and in addition thereto three cents for each child enumerated in excess of fifty, and the cost of said enumeration shall be paid from the amount appropriated by the town for the support of schools in said district. If the return of enumeration is not made to the board of school visitors on or before the said twenty-fifth of September, one of the school visitors or a person duly appointed by the board of school visitors shall make a complete enumeration before the fifteenth of October next following and return it to said school visitors, and shall receive therefor a sum not to exceed five cents for each child so enumerated.

Amended by chapter 64, Public Acts 1903; chapter 31, Public Acts of 1907; and chapter 182, Public Acts of 1913.

Section 2255. Enumeration in consolidated districts. SEC. 2. Section 2255 of the General Statutes as amended by chapter 64 of the Public Acts of 1903 as amended by section two of chapter 31 of the Public Acts of 1907 is hereby amended to read as follows: Town school committees shall annually appoint one or more persons who shall, in September of each year, ascertain the name and age of every person over four and under sixteen years of age who shall belong to such town on the first Tuesday of said month. If any such persons are not attending school during said month of September, then the person making the enumeration shall ascertain the reason for such nonattendance and, if such persons are employed at labor, the names of their employers or of the establishments where they are employed. Returns shall be made to the town school committee on or before the twenty-fifth of September. Said persons so appointed shall receive a sum not exceeding five cents for each child so enumerated. Such return shall be signed by the person making it and sworn to substantially according to the form prescribed in section 2253. The town school committee shall examine and correct the returns made to it so that no person shall be enumerated twice or be improperly returned, and lodge them, as corrected, with the town treasurer, and shall transmit to the comptroller, on or before the fifth of December annually, a certificate in which the number of persons shall be inserted in words at full length, which shall be sworn to substantially according to the form prescribed in section 2254.

Note.—Unless the enumeration is made in all respects according to law, the school board can not make the returns required by General Statutes, section 2167. Failure to make such returns will forfeit all money for the schools of the towns from the State treasury.

Directions.—In column 1, place the full name of the parent or guardian; in column 2, the given name of child and the age of same; in column 3, where the child is now attending school; if not attending any school state in column 4 the name of employer or reason for nonattendance, if not employed indicating blindness or defective sight by letter "B" deaf or dumb by "D" and imbecile by "I."

List of persons over four and under sixteen years of age in school district, in the town of, on the first Tuesday of September, A. D. 19.....

1	2		3			4
Names of parents or guardians.	Children.		Attendance.			Name of employer, or reason for non-attendance.
	Names.	Age.	Town.	District.	Private school.	
.....						
.....						
.....						

I hereby certify that I have carefully enumerated, according to law, all persons over four and under sixteen years of age within the school district, in the town of, and find that on the first Tuesday of September, A. D. 19...., there were of such persons, residing in and belonging to said district, the number of

....., Enumerator.

On this day of, A. D. 19...., personally appeared the above-named and made oath to the truth of the above return by him subscribed. Before me,

....., Notary Public.

[FORM 22. See p. 32.]

DEAR SIR: Please inform me on the attached postal where your child
The certificate number is
If not employed, where is she attending school?

Yours, truly,

HARTFORD, January 4, 1914.
Mary Reusman is now employed.

STATE BOARD OF EDUCATION.
CHAS. D. HINE,
Secretary.

[Folded.]

To the
State board of education,
Room 42, Capitol,
HARTFORD,
Connecticut.

[FORM 22, back. See p. 32.]

[Reverse of lower half of above postal card.]

REPLY ON THIS SIDE.

Town
Date
Signature
Address

[FORM 23. See p. 35.]

Date, February 10, 1914.

Town, Ansonia.
Name of firm, J. W. C. Co.
Post office, Ansonia, Conn.
Business, manufacturing cyclets.
Supt., James Leonard.
No. hands employed, 175.
No. between 14 and 16, ... boys; 4 girls.
No. certificates: Town clerk, ...; teacher, ...; agent, 4.
No. certificates required, none.
No. employed under 14, ... boys; girls.
(Names on reverse side.)

[FORM 24. See p. 35.]

[The spaces left blank here are not usually filled out.]

CONNECTICUT STATE BOARD OF EDUCATION.

Agent, Stephen Wise.
Town, Ansonia.
Date of visit, February 10, 1914.

1. Name of firm, J. W. C. Co.
2. Business, manufacturers of cyclets.
3. Name of superintendent, James Leonard; P. O. address, Ansonia, Conn.
4. Number of hands employed, 175; number between 14 and 16, 8 boys; 4 girls.
5. Is record book used?
6. Certificates of age by town clerk, ...; teacher, ...; agents, 4.
Certificates of age investigated, ...; required, ...
7. Number under 14 employed; 0; boys, 0; girls, 0.
Action taken by agent
Result
8. Number between 14 and 16 unable to read; any language; English
9. Does town maintain evening school?
10. Hours per week, ... Is evening work required?
11. Average wages per week, ...

[FORM 25. See p. 35.]

ESTABLISHMENTS EMPLOYING CHILDREN 14 TO 16.

Town, Ansonia,
Date, June 13, 1913.

Name of firm, J. W. C. Co.
Address, Ansonia, Conn.
Business, m'nf'g cyclets.
Children 14-16 at last inspection, ... boys; 6 girls.
Children 14-16 without legal certificates, 0 boys; 0 girls.
Inspected (dates), February 10, 1914.

(OVER.)

February 10, 1914, 4 girls.

[Form 26. See p. 36.]

Stephen Wisc, Jan'y, 1914.

AGENT'S REPORT.

Labor.

Visitation.

No. towns, 11.

Employed.

	Under 14.	14 to 16.		Illegally employed
		Having cert's.	Not having cert's.	
1. Establishments:				
No. manufacturing, 7.....		29		
No. mercantile.....				
No. mechanical.....				
Other occupations.....				

2. Special cases investigated, 2.

	Continued cases.	New applications.	Total.	Applications.		Certificates issued.	Total.	Notices to attend school.	Statements of age.
				Rejected.	Continued.				
3. Certificates of age.....	65	178	243	56	100	87	243	10	38

4. Prosecutions:

Number, ...

Result in each

number of certificates refused on account of physical disability, none;

number of copies of certificates issued, 185.

5. Number of letters, 453.

	Town.	Days.	Number of applicants.
6. Number of days occupied in issuing certificates.....			

[Form 27. See p. 12.]

OFFICE STATE BOARD OF EDUCATION.

EMPLOYMENT.

When applying for an employment certificate the following are necessary conditions:

1. The parent must appear in person with the child.
2. Satisfactory evidence of child's age must be presented. Town clerk's or registrar's certificate is satisfactory.
3. A transcript from register of school last attended giving age and grade must be furnished.
4. Assurance in writing of definite employment by firm or person must be presented.

Application can be made to—

at.....

[Form 28. See p. 33.]

Town..... Address.....
 Name..... Certificate No..... School..... Grade.....
 Date of birth.....
 Description.....
 Last employed at..... Date of leaving..... Reason.....

Date.	Placed with—	Nature of occupation.	Left.	Date.	Reason.

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, CHM

MENTAL DEFECTIVE
IN THE
DISTRICT OF COLUMBIA

A BRIEF DESCRIPTION OF LOCAL
CONDITIONS AND THE NEED FOR
CUSTODIAL CARE AND TRAINING

DEPENDENT, DEFECTIVE, AND DELINQUENT CHILDREN
SERIES No. I

Bureau Publication No. 13



WASHINGTON
GOVERNMENT PRINTING OFFICE
1914

PUBLICATIONS OF THE CHILDREN'S BUREAU.

Annual Reports:

- First Annual Report of the Chief, Children's Bureau, to the Secretary of Labor for the fiscal year ended June 30, 1913. 20 pp. 1914.
Second Annual Report of the Chief, Children's Bureau, to the Secretary of Labor for the fiscal year ended June 30, 1914. 12 pp. 1914.

Care of Children Series:

- No. 1. Prenatal Care, by Mrs. Max West. 41 pp. 8th ed. 1916. Bureau publication No. 4.
No. 2. Infant Care, by Mrs. Max West. 87 pp. 1914. Bureau publication No. 3.

Dependent, Defective, and Delinquent Classes Series:

- No. 1. Laws relating to Mothers' Pensions in the United States, Denmark, and New Zealand. 104 pp. 1914. Bureau publication No. 7.
No. 2. Mental Defectives in the District of Columbia: A brief description of local conditions and the need for custodial care and training. 70 pp. 1915. Bureau publication No. 13.

Infant Mortality Series:

- No. 1. Baby-saving Campaigns. A preliminary report on what American cities are doing to prevent infant mortality. 31 pp. 8th ed. 1914. Bureau publication No. 5.
No. 2. New Zealand Society for the Health of Women and Children. A summary of the methods of baby-saving work in small towns and rural districts. 32 pp. 1914. Bureau publication No. 6.
No. 3. Infant Mortality. Results of a field study in Lubbock, Tex., based on births in one calendar year, by Emma Duke. 203 pp. 1914. Bureau publication No. 9.
No. 4. Infant Mortality in Montclair, N. J.: A study of infant mortality in a suburban community. 36 pp. 1915. Bureau publication No. 11.

Industrial Series:

- No. 1. Child Labor Legislation in the United States, by Helen L. Sumner and Ella A. Meyth. — pp. 1915. Bureau publication No. 10.
No. 2. Administration of the Employment Certificate System in Connecticut, by Helen L. Sumner and Ethel W. Banks. — pp. 1915. Bureau publication No. 12.

Miscellaneous Series:

- No. 1. The Children's Bureau: A circular containing the text of the law establishing the bureau and a brief outline of the plans for immediate work. 6 pp. 1913. Bureau publication No. 1.
No. 2. Birth Registration: An aid in preserving the lives and rights of children. 20 pp. 3d ed. 1914. Bureau publication No. 2.
No. 3. Handbook of Federal Statistics of Children: Number of children in the United States, with their sex, age, race, nativity, parents, and geographic distribution. 106 pp. 3d ed. 1914. Bureau publication No. 8.

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

MENTAL DEFECTIVES

IN THE

DISTRICT OF COLUMBIA

A BRIEF DESCRIPTION OF LOCAL
CONDITIONS AND THE NEED FOR
CUSTODIAL CARE AND TRAINING



DEPENDENT, DEFECTIVE, AND DELINQUENT CLASSES
SERIES No. 2

Bureau Publication No. 13



WASHINGTON
GOVERNMENT PRINTING OFFICE
1915

Harvard College Library
June 16, 1915
From the
United States Government.

CONTENTS.

	Page.
Letter of transmittal.....	5
Introduction.....	7
Definition of "mental defectives".....	8
Table showing distribution of mental defectives reported in the District of Columbia, by location, color, sex, and age.....	9-11
Sources of information and completeness of data.....	12-14
Situation in the District of Columbia.....	15-19
Provision for mental defectives.....	15
Number of mental defectives.....	15
Ages of mental defectives.....	15
Mental defectives in nonappropriate institutions.....	16-18
Mental defectives attending public schools and at home.....	18
Need of uniform standard of examination.....	18
Mental defectives needing institutional care.....	18, 19
Reasons for segregation and assumption by the State of care of mental defectives.....	20-22
Burden on the family.....	20
Handicap to school system.....	20
Danger to society.....	20, 21
Possibility of training.....	22
Extent of State provision for mental defectives.....	23
Kind of institution adapted to the care and treatment of mental defectives.....	24, 25
Economic aspect of the problem.....	26-28
Investment in land, buildings, and equipment.....	26
Cost of maintenance.....	26-28
Economy of adequate provision.....	28

APPENDIX.

Classified instances of mental defectives in the District of Columbia for whom institutional care is desirable.....	29-39
Mental defect as a cause of dependency.....	29-31
Mentally defective women who are morally delinquent.....	31-33
Children too defective to attend school.....	33
Children in special schools too defective to benefit by such training.....	34
Mental defectives whose families are unable to provide proper care.....	34, 35
Defective delinquents detrimental to the welfare of the community.....	36
Mental defectives who are also physically defective.....	36, 37
Mentally defective women likely to become victims of improper treatment.....	37, 38
Adults who might have profited by institutional training.....	38
Cases indicating defective stock.....	38, 39

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, March 18, 1915.

SIR: I transmit herewith a report on the needs of feeble-minded persons in the District of Columbia.

The fact that there is at present no special provision for this unfortunate class is a matter of concern to many public-spirited citizens of the District. At the request of the Citizens' Committee on the Care of the Feeble-minded, the Children's Bureau undertook to secure a list of known cases of mentally defective persons resident in the District who for their own protection and that of the community were in need of custodial care. The following report is based upon the information thus gathered. Also at the request of the committee, brief statements as to the problem of the feeble-minded in general and public provision therefor have been added.

The report has been prepared by Miss Emma O. Lundberg, social service expert of the bureau, with the assistance of Miss Katharine F. Lenroot and Miss Nettie B. Browne.

Very respectfully,

JULIA C. LATHROP, *Chief.*

Hon. WM. B. WILSON,
Secretary of Labor.

MENTAL DEFECTIVES IN THE DISTRICT OF COLUMBIA.

INTRODUCTION.

The following study of the extent of the problem of mental defectiveness in the District of Columbia was undertaken at the request of a citizens' committee. This committee of about 40 persons, organized under the leadership of the Monday Evening Club, is composed of representatives of various philanthropic and social agencies and institutions of the District whose dealings with the problems of the community have made them realize the urgent need for securing an institution for the proper care and treatment of mental defectives.

Reports of organizations and institutions of the District of Columbia have repeatedly stated the necessity for proper custodial provision. The District Board of Charities in its annual report for 1914 presents the need as follows:

We again urge the importance of providing proper facilities for the segregation and care of the feeble-minded. This is a question which is receiving active attention throughout the entire country. It is now generally realized that the only effective method of handling this problem is to provide permanent custodial care where this class may be safely segregated from the community and prevented from reproducing their kind. The District of Columbia has at present no provision within its confines for the care of this class. About 100 are cared for under contract in institutions located in Pennsylvania, New Jersey, and Virginia, and a few older persons are cared for in the hospital for the insane.

The Board of Children's Guardians reports as follows:

Provision for the care of feeble-minded children remains in the same unsatisfactory condition as a year ago and for many years preceding. While bills have been pending in the Congress for several years intended to establish a training school in the District of Columbia for feeble-minded children, none has been enacted. The need of such an institution is especially urgent, as no training school for the care of feeble-minded colored children of this District is available elsewhere.

The superintendent of the Home for the Aged and Infirm, after describing cases of inmates who are in the institution, not because they are old but because of mental or physical infirmity, says:

Under these conditions can this institution be made all that the public intends it shall be—all that the Board of Charities have constantly striven to make it—a home? But relief from these anomalous conditions is obviously only to be found in the execution of the board's plan to have a separate institution for each distinct class of its dependents.

The trustees of the National Training School for (Colored) Girls reported to the Board of Charities:

The attention of Congress should be invited to the necessity of caring for feeble-minded colored girls. In the past many such have been sent to this school because of the lack of an appropriate institution to care for them. Manifestly this is not the place; no progress is made with them, and their presence is a decided drawback.

The superintendent of the same institution states in her report:

I would advise legislation providing for the care of feeble-minded colored girls, whom we are reasonably sure, from direct knowledge of such cases, will become the helpless mothers of successive illegitimate children.

The data gathered in regard to conditions in the District of Columbia furnish evidence bearing on the many phases of this problem—the individual suffering and degeneration, the burden to families, the handicap to the school system, and the danger to the whole community resulting from the lack of proper provision for those suffering from mental defect.

In view of the close relationship between mental defect and problems of child welfare, the library of the Children's Bureau is collecting material pertaining to all phases of the subject of mental defect, including reports of institutions. This material is at the service of those interested in the care of mental defectives.

DEFINITION OF "MENTAL DEFECTIVES."

The term "mental defect" implies congenital defect or defect occurring in early life as contrasted with "insanity," implying a diseased condition developed in later life. The term "feeble-mindedness" is now largely used in the United States as a generic term applied to all persons who because of mental defect are incapable of normal development.

The generally accepted classification divides feeble-mindedness into three grades: Idiots, the lowest type; imbeciles, the middle type; morons, the highest grade. The American Association for the Study of the Feeble-minded in 1910 adopted the following classification¹ of mental defectives:

"Idiots—Those so deeply defective that their mental development does not exceed that of a normal child of about 2 years.

"Imbeciles—Those whose development is higher than that of an idiot, but does not exceed that of a normal child of about 7 years.

"Morons—Those whose mental development is above that of an imbecile, but does not exceed that of a normal child of about 12 years."

¹ Journal of Psycho-Asthenics, March and June, 1911, p. 134.

Table showing distribution of mental defectives reported in District of Columbia, by location, color, sex, and age.

Location.	Total.		White.																Total.									
	Total.	Colored.	Males.								Females.								Total.	Colored.								
			Under 6 years.	6 to 8 years.	9 to 11 years.	12 to 14 years.	15 to 17 years.	18 to 20 years.	21 to 25 years.	26 to 30 years.	31 to 35 years.	36 to 40 years.	41 to 45 years.	46 years and over.	Under 6 years.	6 to 8 years.	9 to 11 years.	12 to 14 years.			15 to 17 years.	18 to 20 years.	21 to 25 years.	26 to 30 years.	31 to 35 years.	36 to 40 years.	41 to 45 years.	46 years and over.
Total.	798	534	264	305	9	19	41	62	39	33	24	19	13	15	16	229	6	17	20	34	24	27	20	13	16	10	8	34
In appropriate institutions.	97	95	2	66	5	7	8	14	11	8	8	4	1		29	2	1	5	1	5	1	9	7	2	1	1		
Vineland (N. J.) Training School.....	6	6	.....	4	.....	.....	.....	2	1	1	.....	.....	.....	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....		
Pennsylvania Training School for Feeble-minded Children (Elwyn).....	52	50	2	37	.....	6	5	7	5	3	7	4	.....	.....	13	1	1	2	1	3	1	2	1	1	.....	.....		
Virginia Training School (Falls Church).....	39	39	.....	25	5	1	3	5	5	4	1	.....	1	.....	14	1	.....	3	.....	4	6	.....	.....	.....	.....	.....		
In other institutions.	249	142	107	68	2	6	9	4	3	5	6	2	10	10	11	74	1	1	4	1	5	4	6	6	7	6	5	28
Government Hospital for the Insane.....	176	94	82	43		1		1	1	5	6	2	7	9	11	51					2	4	2	5	6	5	27	
Home for the Aged and Infirm.....	11	5	6	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....		
Florence Crittenton Mission.....	7	7	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	2	3	1	.....	.....		
Industrial Home School.....	7	7	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
National Training School for Girls.....	11	11	.....	6	2	2	2	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
National Training School for Boys.....	2	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Orphan Asylums (Washington, St. Joseph's, St. Vincent's, National Colored Home).....	8	6	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Brunn Home.....	11	11	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Other institutions for delinquents.....	3	1	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Washington Asylum Hospital.....	6	3	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Hospital, Freedmen's Hospital.....	7	6	1	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Institution not ascertained.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Not in institutions.	452	297	155	171	9	12	28	45	21	19	11	5	7	4	5	126	5	14	15	28	18	14	7	5	8	3	6	
Boarded out by Board of Children's Guardians.....	24	.....	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	.....	9	9	20	4	.....	.....	.....	.....	.....	.....		
In atypical and regular schools.....	139	107	32	65	8	17	32	6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Not in school (6 to 15 years, inclusive, too defective to attend).....	33	23	10	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	.....	3	3	6	.....	.....	.....	.....	.....	.....	.....		
At home (under 6 and over 15 years).....	198	130	68	67	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	63	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Location not ascertained.....	58	37	21	28	4	7	9	1	1	2	1	3	.....	.....	9	.....	2	3	2	.....	.....	.....	.....	.....	.....	.....		

Table showing distribution of mental defectives reported in District of Columbia, by location, color, sex, and age—Continued.

Location.	Colored.																										
	Males.													Females.													
	Total.	Under 6 years.	6 to 8 years.	9 to 11 years.	12 to 14 years.	15 to 17 years.	18 to 20 years.	21 to 25 years.	26 to 30 years.	31 to 35 years.	36 to 40 years.	41 to 45 years.	46 years and over.	Total.	Under 6 years.	6 to 8 years.	9 to 11 years.	12 to 14 years.	15 to 17 years.	18 to 20 years.	21 to 25 years.	26 to 30 years.	31 to 35 years.	36 to 40 years.	41 to 45 years.	46 years and over.	
Total.....	133	1	5	9	17	27	20	15	8	8	11	6	6	131	4	6	7	15	19	18	12	6	13	8	4	10	
In appropriate institutions.....														2									1	1			
Pennsylvania Training School for Feeble-minded Children (Elwyn).....														2									1	1			
In other institutions.....	54		1	1	3	5	5	7	5	7	10	5	5	53	2		2	4	6	7	6	2	8	4	4	8	
Government Hospital for the Insane.....	48		1	1	1	5	5	6	5	5	9	5	5	34	1		1	3		3	3	2	6	3	4	8	
Home for the Aged and Infirm.....	4							1	1	2	1			2													
National Training School for Girls.....														11				6	4	1							
Orphan Asylums (Washington, St. Joseph's, St. Vincent's, National Colored Home).....	1				1	1								1			1										
Other institutions for delinquents.....	1				1									1													
Washington Asylum Hospital, Children's Hospital, Freedmen's Hospital.....														3	1		1		1					1			
Institution not ascertained.....														1													
Not in institutions.....	79	1	4	8	14	22	15	8	3	1	1	1	1	76	2	6	5	11	13	11	15	4	4	3		2	
Boarded out by Board of Children's Guardians.....	21		1	2	3	7	5	3						3					1		2						
In atypical and regular schools.....	17		1	4	9	3								15		4	1	7	3								
Not in school (6 to 15 years, inclusive, too defective to attend).....	3			2		1								7		2	3	1	1								
At home (under 6 and over 15 years).....	29	1			2	7	9	5	3	1	1	1	1	39	2				3	11	3	4	3			2	
Location not ascertained.....	9					2	4	1						12			1	3	5		2	1					

The sex and race distribution, by age, is summarized in the following table:

Sex and race distribution, by age.

Age.	Total.	Sex.		Race.		White.		Colored.	
		Male.	Female.	White.	Colored.	Male.	Female.	Male.	Female.
All ages....	798	438	360	534	264	305	229	133	131
Under 6.....	20	10	10	15	5	9	6	1	4
6 to 8.....	47	24	23	36	11	19	17	5	6
9 to 11.....	77	50	27	61	16	41	20	9	7
12 to 14.....	128	79	49	96	32	62	34	17	15
15 to 17.....	109	66	43	63	46	39	24	27	19
18 to 20.....	96	53	43	60	36	33	27	20	18
21 to 25.....	80	39	41	44	36	24	20	15	21
26 to 30.....	46	27	19	32	14	19	13	8	6
31 to 35.....	50	21	29	29	21	13	16	8	13
36 to 40.....	44	26	18	25	19	15	10	11	8
41 to 45.....	33	21	12	23	10	15	8	6	4
46 and over.....	66	22	44	50	16	16	34	6	10

SOURCES OF INFORMATION AND COMPLETENESS OF DATA.

An effort was made to secure as complete an enumeration as possible of the mental defectives of the District of Columbia who might be assumed to be proper cases for institutional treatment. Valuable assistance was given by the teachers of public, parochial, and atypical schools, the Board of Charities and the Board of Children's Guardians of the District, all the reformatory institutions for children, orphan asylums, church societies, hospitals, social settlements, relief-giving societies, physicians, pastors, and private individuals. About 200 cases were visited by an agent of the Children's Bureau for verification and further data.

A total of 889 names were reported, but of this number 91 were either duplicates or names regarding which the information was so meager that the persons were not traceable, leaving a total of 798 individuals reported as being in need of institutional care. (See table, pp. 9, 10.) It is of course necessary to assume that a large number of the cases so reported would be found on further investigation not to be proper cases for institutions; but on the other hand it is self-evident that the enumeration does not include the total number of those who would benefit by the right kind of institutional treatment.

Complete information obviously could not be secured in a survey of this kind. It was impossible to make any test of mentality in order to determine accurately the number of mental defectives in the various reformatories and institutions for dependents, or to attempt to determine the number of mentally defective children in the schools except as this has already been done in connection with the atypical schools. Accurate information in regard to individuals neither in schools nor in institutions was still more difficult to obtain.

In order to determine conclusively the mental condition of an individual it is necessary to consider his family history, general environment, illness that may have resulted in retardation or permanent handicap, present physical condition, personal habits, conduct and peculiarities, schooling, and employment record. The decision as to the need for custodial care in a given case must be influenced by social conditions, including the character of the home and the ability of the family to provide the necessary training and safeguards. The number of individuals requiring custodial care remains approximately the same, although the personnel of the group varies with constantly changing conditions.

Authorities on mental diseases have estimated that the number of mental defectives in a community usually approximates the number of insane. On this basis the number in the District of Columbia would be between 1,400 and 1,500. The percentage of mental defectives needing custodial treatment, however, would not be so large as among the insane. According to estimates based on findings of various inquiries in the United States and in other countries, the 798 individuals reported during the course of this investigation as mentally defective represent a very conservative proportion of the total population of the District of Columbia. This enumeration was made for the purpose of discovering the number of persons in need of institutional treatment; and the number reported, allowing for the margin of error in omission and inclusion, is probably a fair representation of the number in the District who should have custodial care. (See table, pp. 9, 10.)

The data concerning children of ordinary school age—6 to 15 years, inclusive—are naturally more complete than for very young children or adults. Those under 6 years would not come to public attention except in cases in which family conditions are such that the care of children who are mentally and physically defective becomes an unbearable burden. The children of the ages of 6 to 15 years too defective to attend school were difficult to locate for the same reason. Adults, especially adult men, unless they have become inmates of penal or other institutions or have become a burden to their families, would not naturally come to the attention of physicians and social workers who contributed the information contained in this report. The situation in regard to mentally defective women of child-bearing age is somewhat different, a larger proportion of adult females being discovered on account of the public recognition of the danger of this class.

There is a very striking increase in the number of feeble-minded in the 9 to 11 age group, while the 12 to 14 age group is very much larger than any preceding. This is explainable by the fact that it is only after extended attempts at training that positive assertions in regard to mental defect can be made. Experts on the subject claim that it is difficult to determine the mental condition of a child younger than 12 years. After the age of 14 years there is a steady decline in the number of each age group, due to the lack of information concerning those not in school.

Data were secured concerning 534 white and 264 colored mental defectives. The population of the District of Columbia, according to the census of 1910, is 331,069, of which 94,446 are colored. The colored residents of the District thus comprise 28.5 per cent of the total population and 33.1 per cent of the mental defectives concerning whom information was secured. Information concerning colored

mental defectives is incomplete because there are no institutions for them at present, therefore no waiting lists, and apparently there is less familiarity with their condition. Attendance officers report difficulty in enforcing the compulsory-education law because the colored families move frequently and are often impossible to locate. The table (pp. 9, 10) covering the enumeration of mental defectives in the District brings out strikingly the lack of provision for any degree of proper care for colored mental defectives.

Information was obtained concerning 305 white males and 229 white females. The smaller number of females reported is probably accounted for by the fact that mothers often keep their defective daughters in the home, both because of the danger they may encounter outside and because the girls can assist in the household tasks. The boys can not be kept in so easily, thus coming to the attention of neighbors and others.

It is comparatively easy to get information concerning the lower grades of the mental defectives—the idiots and imbeciles. They are in general placed in institutions so far as accommodation is provided. The situation is different with regard to the high-grade mental defectives, the so-called morons. Their defectiveness does not generally become known until they have committed some depredation or have given evidence of moral delinquency.

SITUATION IN THE DISTRICT OF COLUMBIA.

PROVISION FOR MENTAL DEFECTIVES.

The District of Columbia has no institution for mental defectives. Since 1902 Congress has made separate appropriations to the Board of Children's Guardians for the care of feeble-minded children under their guardianship or referred to them. White children are maintained in training schools at Vineland, N. J., Elwyn, Pa., and Falls Church, Va. Colored children are boarded out in private homes.

NUMBER OF MENTAL DEFECTIVES.

Of the 798 discovered cases of mental defect, 428 are at large in the community, 249 are inmates of institutions not especially designed for the care of mental defectives, 97 are in training schools for the feeble-minded outside of the District, 24 are boarded out in family homes under the supervision of the Board of Children's Guardians. Fifty-four per cent of the total number listed are neither in institutions nor under the supervision of public authorities. This percentage would undoubtedly be higher if the enumeration of mental defectives in the District were entirely accurate. Proper care is taken of only 12 per cent of the total number.

Among the mental defectives enumerated is a considerable number reported as being epileptic also. No attempt has been made to classify these, as the number is necessarily very incomplete and includes only the epileptics primarily considered mentally defective. Besides these there is a very important class of epileptics who are normal between seizures, but who are none the less in need of custodial treatment and an opportunity for training. The epileptic patients of the Government Hospital for the Insane are not included in this report, as the greater number of them are insane. The population of the District of Columbia probably does not warrant the creation of a separate institution for epileptics. Insane epileptics could be cared for in a colony connected with the Government Hospital for the Insane. It is necessary, however, to make proper custodial provision for epileptics who are normal between seizures and those who are mentally defective.

AGES OF MENTAL DEFECTIVES.

Of the 798 mental defectives enumerated in this report, 272 are under the age of 15 years; 207 are between 15 and 20 years, inclusive; 253 are between 21 and 45 years, inclusive; and 66 are over 45 years. A striking fact revealed is that the greater number of persons now

in institutions are older people rather than children of the ages when training would be profitable. This is due to the character of the institutions, the limited accommodations, and the necessarily long residence. Only one-fourth of the children under 15 years of age are in institutions, as compared with two-thirds of the mental defectives of 21 years of age and over.

A comparison of the relative number of males and females over and under the age of 20 years reported as mental defectives shows a larger percentage of boys between 12 and 20 years (45 per cent of the boys and 38 per cent of the girls), and a predominance of women over the age of 20 years (36 per cent of the men and 45 per cent of the women). This may be due to the different kinds of delinquency and the ages at which manifested. Of those enumerated, 207, or 26 per cent, are women between the ages of 15 and 45 years, the child-bearing period.

MENTAL DEFECTIVES IN NONAPPROPRIATE INSTITUTIONS.

Of the mental defectives in institutions not specially designed for their care, 73 are inmates of reformatory institutions, hospitals, and homes for dependents, and 176 are in the Government Hospital for the Insane, having been sent there for protection because there is no other place for them. The Board of Children's Guardians boards out 24 colored children in private homes.

The presence of mental defectives in institutions not designed for them is detrimental to their own welfare, since they can not be given the training and mode of living their condition requires, and is a grave disadvantage to others for whom the institutions are adapted. As to the colored children boarded out in family homes, it can hardly be doubted that in the end a properly equipped institution would be a safer and more economical method of caring for them.

Beyond question, the Government Hospital for the Insane should not be compelled to care for the feeble-minded. Youthful mental defectives needing training and custodial care are out of place in a hospital. They are a burden upon it, and it is unfair to demand from a hospital the facilities for industrial training needed for the feeble-minded. The records of the Government Hospital for the Insane show 176 inmates classed as "idiots, imbeciles, and feeble-minded." The presence of feeble-minded persons, whether adults or children, in the wards of the hospital often involves unnecessary suffering for both the feeble-minded and the insane and in justice to either class should not be permitted. Some of these people have lived in the institution a lifetime, and the hospital has protected them and society; but no hospital for the insane should be asked to do this work.

One of the feeble-minded inmates is a woman now about 72 years of age. She was first admitted to the institution in 1855, at the age

of 12 years, and, with the exception of a few years when her stay was intermittent, has lived there constantly. This woman has been provided with shelter and care and protected from helpless motherhood that would have involved the community in unending expense. On the other hand, she has been unnecessarily subjected to the restraint and conditions surrounding the insane. Had she been from childhood in an institution in which she could have received the training and education her mental condition made possible, she would have spent the years of her institutional life (almost 60) in useful occupation that not only would have made her happier but would also have yielded some return to society.

The records of the institution show a surprisingly large number of young children. It is safe to assume that the circumstances in the case of those patients were such that institutional care was an extreme necessity. A mere statement of the ages at which many of the present inmates were admitted shows what the home pressure must have been. Nine of the inmates are now under 15 years of age, 2 of them being 5 and 8 years of age, respectively; 24 of the present inmates were admitted when they were under 15 years of age, 2 of them at the age of 5, 2 at 6, and 4 at 9 years of age.

The advanced ages of a large number of the inmates, the length of time they have been kept in the institution, and ages at commitment indicate that the authorities feel the necessity for custodial care of both males and females beyond the ages specified by some States. Of the inmates at the time of the investigation classified as imbeciles, idiots, and feeble-minded, 42 per cent were over the age of 40 years; 40 of these are 41 to 50 years of age, 25 are 51 to 60 years of age, 8 are 61 to 70 years, and 1 is 75 years of age.

Confinement in an institution apparently has proved to be necessary for the proper care of the mentally defective individual as well as for the protection of society. Following are some instances of extended confinement in the institution: A colored girl, classed as an idiot, was admitted at the age of 6 years and has been an inmate 19 years. A white boy, an imbecile, was admitted at the age of 9, 20 years ago, and another boy of the same description, admitted at the age of 12, has been in the institution 29 years. An imbecile colored girl, admitted at the age of 12, has been cared for 41 years, and 2 other imbecile colored girls, admitted when 14, have been inmates 18 and 21 years. An imbecile white boy, admitted when 16, has been an inmate 25 years; an imbecile white girl, admitted at 17, for 32 years; and another imbecile white boy, admitted at 17, for 20 years. An imbecile white boy, 18 years of age when admitted, has been in the institution 40 years. Three imbecile colored boys, admitted when they were 19, have been in the institution 29, 13, and 12 years, respectively, and a white boy of the same age for 20 years.

A colored girl, 2 colored boys, and 2 white girls, all classed as imbeciles and admitted when they were 20, have been in the institution 14, 16, 20, 22, and 26 years, respectively.

MENTAL DEFECTIVES ATTENDING PUBLIC SCHOOLS AND AT HOME.

There are in the District several atypical schools. These schools are designed to give special attention to children who are subnormal or are backward for one reason or another. Many children are so defective that they can not be cared for at all in this way, and many now in the schools constitute a menace to the other pupils. One hundred and thirty-nine children in the regular and atypical schools were reported as being so defective mentally as to need institutional care. Thirty-three others were found to be too defective to attend school, and this number is undoubtedly too low, as these cases are difficult to trace; 20 feeble-minded children under 6 were discovered, many of them physically deformed; 181 persons over 15 were staying at home, neither attending school nor, except in a few cases, engaging in any form of remunerative labor or other occupation. The condition of those not cared for in institutions is illustrated by the cases cited at the end of this report.

NEED FOR UNIFORM STANDARD OF EXAMINATION.

In making this study no attempt has been made to discriminate between various methods of determining mental status, but statements of physicians, teachers, and others having considerable contact with the problem have been accepted. In determining who shall be admitted to an institution for the feeble-minded, it is necessary that there should be some standard method of ascertaining mental status. The method of such determination is a matter that requires careful consideration. It is necessary to decide whether there should be an official examining board, as for the insane, or a commission on which psychologists and physicians are represented, or some other method of examination. There is now no recognized standard of determination.

MENTAL DEFECTIVES NEEDING INSTITUTIONAL CARE.

This enumeration is not based upon a scientific study of the mental and social conditions of the individuals reported as possible subjects for an institution. In view of this fact, and because of ever-changing family circumstances, it is impossible to specify the exact number to be provided for. The following figures, however, for the purpose of rough approximation, may be taken as indicative of the situation. Of the 798 enumerated, it is plain that the 308 persons in the three training schools, the Government Hospital for the Insane, the Home for the Aged and Infirm, and boarded out by the Board of Children's Guardians are of a class which authorities recognize as needing the care of special institutions. The training schools are overcrowded.

It is always a question whether accommodation can be secured for the children from the District of Columbia, and there is no economy in thus sending the children abroad for care. Sixty-two individuals were reported as being mentally defective inmates of various reformatories and philanthropic institutions. These institutions do not provide the kind of environment and training adapted to mental defectives, and the work for which they were intended is handicapped by the presence of this class. It is possible that a scientific test of all the inmates of these and other institutions would reveal a large number which should be added to the list of mental defectives. The 139 children in atypical and other schools reported as needing institutional care have been under the observation of their teachers long enough and have been tested sufficiently to make it probable that they should be classed as proper institutional cases. To these should be added 36 reported by teachers as former pupils. Over 100, mainly children, were reported by physicians as living at home but being in need of institutional care.

In making an estimate of the probable number to be provided for in an institution designed for the care and treatment of mental defectives, it must be borne in mind that besides the cases discovered in this investigation there are a considerable number of individuals in need of custodial treatment concerning whom no report has been secured. It is also necessary to consider that some inmates of non-appropriate institutions, particularly persons of advanced age, properly might be left where they now are, and that all of those designated as needing custodial care would not be placed in an institution no matter what the conditions of commitment might be. Although many of those enumerated would no doubt be found to be properly cared for in their own homes without detriment, a surprisingly large number of parents who were visited expressed themselves as eager to have custodial care provided for their children, either because the burden was too great or for the sake of having the children properly safeguarded. Many who had been successful in their efforts to provide for mentally defective children were fearful of what would happen when they were no longer able to do so.

It is necessary in making plans for the proposed institution to allow for the fact that the number of inmates will increase as the institution becomes better established and as the public becomes familiar with its purposes and the value of its work to those cared for and to society. It has been said that the presence in a community of any specified type of defectives becomes apparent only when accommodations are provided for the care of this particular class. Without question this will be found to be the situation in the case of mental defectives and particularly of epileptics. The presence of the institution will reveal needs that do not now come to light.

REASONS FOR SEGREGATION AND ASSUMPTION BY THE STATE OF CARE OF MENTAL DEFECTIVES.

The past few decades have witnessed a remarkable change in public attitude toward mental defectives and progress in methods of treatment. Instead of being regarded as an individual misfortune, mental defect has come to be recognized as a destructive social force. The idea is now generally accepted that custodial care should be provided for mental defectives for their own safeguarding and for the protection of society, and that they should be given whatever training their mental condition makes possible.

The reasons for segregation of mental defectives and assumption of their care by the public may be summarized as follows:

BURDEN ON THE FAMILY.

A very large number of mentally defective children and adults who are so deficient that they are unable to earn their own living belong in families on the border line of poverty, barely able to be self-supporting under normal conditions. Many of the mentally defective are also seriously handicapped physically. A member of the family unable to care for himself may consume the time of one who might otherwise be a wage earner, and pauperization results from this unnatural burden. A mentally defective child in a family demands a large share of the energy of the mother and not only interferes with the training of the other children but exercises a demoralizing influence on the family life.

HANDICAP TO SCHOOL SYSTEM.

The presence of mentally defective children in regular and special grades is a serious handicap to the training of the other children, taking an undue proportion of the attention of the teacher and resulting often in moral contamination. In the course of this investigation numerous instances were encountered illustrating the seriousness of this situation. Children who should be in atypical schools and would profit by their training there are kept out by their parents because of the presence in the schools of very defective children.

DANGER TO SOCIETY.

The danger to society of the mentally defective woman of child-bearing age is easily demonstrated and generally recognized. A more intensive study than has yet been made would be necessary in order

to prove the comparative danger to society of the adult male who is mentally defective, but it is apparent from recent writings on this subject that the generally accepted idea of the proportionally slight menace of the adult male is being challenged. Certainly the records of penal institutions, juvenile courts, and jails provide testimony on the danger of the antisocial instincts of mentally defective adolescents.

The connection between mental defect and delinquency has been demonstrated through studies made by reformatories and penal institutions and courts handling juvenile offenders. It is generally agreed that a considerable proportion of the inmates of penal institutions would be pronounced defective if examined by alienists. This proportion increases very decidedly among old offenders, indicating the danger to society of attempting reformation in the ordinary way where the mental condition makes it impossible. The number of mental defectives among recidivists emphasizes the need of discovering mental defect early in the careers of delinquents and segregating them permanently for their own welfare and for the protection of society.

Studies of the subject and experiments in custodial care have proved the necessity of adopting measures looking toward the prevention of the propagation of mental defectives. Authorities agree in their estimates that probably two-thirds of our mental defectives are so through inheritance. The British Royal Commission on the Care and Control of the Feeble-minded determined, as the result of the evidence gathered, that feeble-mindedness is in a great number of instances an inheritance, and that the prevention of parentage by feeble-minded persons would tend largely to diminish the number of such persons in the population. Dr. Walter E. Fernald, superintendent of the Massachusetts School for the Feeble-minded, makes a statement that from 60 to 80 per cent of the cases of feeble-mindedness are of direct inheritance. Dr. Henry H. Goddard, of the Vineland (N. J.) Training School, found that one or both parents of 65 per cent of the children in the training school were actually feeble-minded.

Studies of family records have shown the results of transmission of mental defect from one generation to another. Current news items abound in details of atrocious crimes whose character indicates that they were committed by persons mentally unsound and of offenses against the law for which the perpetrators, because of their mental condition, can not be held legally responsible. By means of segregating mental defectives it is possible to cut off at the source a large proportion of degeneracy, pauperism, and crime. It is through prevention that the largest benefits will accrue.

POSSIBILITY OF TRAINING.

While it is impossible to supply missing mentality through any course of training, many individuals who are deficient mentally may be made useful to themselves and society if they can be trained under proper conditions difficult to secure in the home or ordinary school. They may be taught to care for themselves properly and to feel an interest in sharing the work of the community. The training must be largely manual, fitting them for work around the household, farm, and shop. Farm colonies and industrial institutions have proved that mental defectives in some cases may be made self-supporting, a condition which not only relieves society of the burden of their care but turns their energies from injurious and morbid channels into useful and happy ones.

EXTENT OF STATE PROVISION FOR MENTAL DEFECTIVES.

Thirty-four States have provided institutions for the care of mental defectives, accommodating altogether approximately 25,000 persons. The number of patients cared for by each State runs from less than 100 in five States, to more than 3,000 in New York and Pennsylvania institutions. Ten States have between 1,000 and 2,000 inmates in institutions for the mentally defective, and the remainder from 100 to 500. In going over reports of State institutions, we almost invariably find the statement that the institutions are overcrowded and that there is entirely inadequate provision made for the feeble-minded.

Ten States have provided for institutions designed entirely for women, or have recognized the necessity for segregation of women of child-bearing age by the specific inclusion under the admission rules of women through the age of 45 years. In many States where there is no stated age limit, special attention is paid to women who because of their mental defect are unsafe if left at large.

In over half of the States no age limitations for admission are specified in the law relating to the institutions for mental defectives. Following are the ages at which patients may be admitted in various States: New Hampshire, males, 3 to 21; females, over 3 years; Nebraska, over 5 years; Iowa, 5 to 46 years; Oklahoma, males, 5 to 16; females, over 5 years; Vermont, 5 to 21 years; Colorado, 5 to 20 years; Maine, Michigan, North Carolina, and Wyoming, over 6 years; Missouri, 6 to 45 years; Indiana, males, 6 to 16; females, 6 to 45 years; Montana, 6 to 21 years; Kentucky, 6 to 18 years; New Jersey and Virginia, 12 to 45 years.

The Wyoming statutes relating to the care of the feeble-minded and epileptic of the State give a comprehensive statement of the generally accepted modern idea of the problem:

The object of said institution [home for the feeble-minded and epileptics] shall be to provide by all proper and feasible means, and intellectual, moral and physical training of that unfortunate portion of the community who have been born, or by disease, have become imbecile or feeble-minded or epileptic, and by a judicious and well adapted course of training, management and treatment, to ameliorate their condition, and to develop as much as possible their intellectual faculties and physical health, and reclaim them from their unhappy condition, and fit them as far as possible for future usefulness in society. (Comp. Stat. of Wyoming, 1910, sec. 493.)

KIND OF INSTITUTION ADAPTED TO THE CARE AND TREATMENT OF MENTAL DEFECTIVES.

The newer State institutions for mental defectives have followed the colony plan of organization, combining a custodial department, training school, industrial department, and farm. The institutions built during the past 20 years have adopted the cottage or detached type of construction, allowing for classification according to age, sex, mental and physical condition, and grade of inmates. It is to be noted that the larger States are now providing separate institutions for epileptics, for children, and for adult women.

Owing to the relatively small population of the District of Columbia, it is out of the question to provide separate institutions for the different types of mental defectives. Provision is needed for children and adults, for those whom it is possible to train for some form of useful work, and for those physically handicapped or so defective mentally that they must have purely custodial care. Not only the various grades of mental defectives, but certain epileptics need care and protection. The institution should be large enough to provide the necessary room for all these classes, allowing for proper separation of white and colored, male and female. A large tract of land must be provided in order to allow for necessary classification. Again, the acreage should be large enough so that when future development is necessary the District will have the land needed for expansion.

The buildings should be planned in such a way as to admit of economical adaptation to future development and changing needs. Costly construction is both unnecessary and undesirable. The great diversity of needs of the various inmates—custodial care, mental and moral training, farm work, and industrial occupations—calls for an institution composed of many units, forming one central organization.

In an institution of this kind it is particularly essential to provide work suitable for the able-bodied boys and men. This class is provided for by the establishment of farm colonies as adjuncts to the training schools and custodial departments. In establishing a farm colony ample acreage, rather than land already prepared for cultivation, is now held to be the most important consideration for its success. Certain of the most progressive American institutions for feeble-minded are now successfully developing farm colonies on rough, uncleared land. The work of clearing land, hewing timber, construction of necessary farm buildings, and all the labor involved in preparing land for agricultural purposes, provides useful and remunerative occupation.

Among instances of farm colony development may be mentioned the Templeton colony of the Massachusetts School for the Feeble-minded, Letchworth Village, in New York, and the farm colony connected with the Vineland (N. J.) Training School.

The Massachusetts School for the Feeble-minded is one of the oldest institutions in the country, embodying in itself a history of American methods of dealing with the feeble-minded. The school at Waverley, with its adjunct, the farm colony at Templeton, is a type of public institution that has accumulated valuable experience in methods of providing training and employment for the various types of inmates.

The Sixty-Sixth Annual Report of the Trustees of the Massachusetts School for the Feeble-minded (1913) describes the institution at Waverley as follows:

The plan of detached and separate departments greatly facilitates the proper classification of our inmates according to age and mental and physical condition and helps us to secure to each inmate the consideration of individual wants and needs so hard to get in a large institution where the inmates are massed in one huge building. As we are now arranged, our inmates are classified as follows: At the girls' dormitory are the girls of school grade; at the boys' dormitory and the boys' home are boys of the school department; at the north building are the adult males of the lower grade, the cases requiring much personal care and attention; at the west building are the young and feeble boys and the females of the lower grade; at the girls' home * * * are the adult females who are in good bodily health, many of them graduates of our school department, and all of whom are employed in the various domestic departments of the institution; at the farmhouse and the east building are the adult males who are regularly employed in the farm work. In the hospital are the feeble girls and those acutely ill. Thus we have divided our institution into 11 comparatively small families, each with distinctive and peculiar needs, and all under the same general management. This plan retains all the benefits of a small institution and secures the manifest advantages of a large one.

The following is an extract from the Report of the British Royal Commission on the Care and Control of the Feeble-minded (1904),¹ giving the impression of the commissioners as to the situation in the United States:

Our members [the commissioners who visited the United States] were struck by the originality and directness of the methods adopted in several of these institutions with a view to stimulating the activity of the perceptive powers of the inmates, and also by the freedom from cramping and unnecessary regulations which enabled the managers to apply their minds to new experiments in education and organization. They were also impressed with the large size of the American institutions, some of which contained from 500 to 2,000 inmates. This seems to them to secure proper classification, the general plan being that each institution contains three departments, and it is perfectly easy to transfer an inmate from one to another. These departments are the Custodial care for the lowest grade (i. e., idiots), the school for the higher grade children, and the Industrial for the higher grade adults. These departments are entirely separate and often at some little distance one from the other, though under the same central management. Our members are of opinion that the large size of the institution tends not only to better classification but to greater economy. They also point out that the provision for the feeble-minded in America is on very economical lines.

¹ Vol. VIII, p. 297.

ECONOMIC ASPECT OF THE PROBLEM.

INVESTMENT IN LAND, BUILDINGS, AND EQUIPMENT.

The investment in lands and buildings for State institutions for the mentally defective varies greatly. Much of this variation, of course, is due to the difference in the number of inmates provided for and also to the difference in the price of land in the various localities. A considerable part of this capital outlay represents investment in farm lands and equipment, the returns from which help maintain the institution, representing, therefore, an appropriation for part of the maintenance covering a large number of years.

The State institutions of Kansas, Missouri, Nebraska, one of the Massachusetts institutions (Wrentham State School), and one of the New York institutions (Syracuse State Institution for Feeble-minded Children), have from 400 to 600 inmates.¹ The investment for buildings, grounds, and equipment in these institutions varies from \$351,000 in Kansas to \$550,000 in Missouri. The investment at Syracuse, however, (\$462,784) does not include equipment.

In the State Custodial Asylum for Feeble-minded Women, at Newark, N. Y., there are 852 inmates, and the investment for buildings, grounds, and equipment amounts to about \$438,117.

The State institutions of California, Michigan, and Wisconsin and the semiprivate institution at Elwyn, Pa., have each about 1,000 inmates. The value of buildings and grounds, including equipment in all except the training school at Elwyn, ranges from \$708,197 in Michigan to \$838,737 in Wisconsin.

Dr. Fernald, in his History of the Treatment of Feeble-minded, says:

The experience of these institutions * * * has been that plain, substantial, detached buildings can be provided for the custodial cases at an expense of not over \$400 per capita. These detached departments are generally supplied with sewerage, water supply, laundry, storeroom, and often heating facilities from a central plant, at relatively small expense compared with the cost of installation and operation of a separate plant for each division.

COST OF MAINTENANCE.

The average annual per capita cost in 30 State institutions for which figures were obtainable was \$192. The cost in the various institutions ranged from \$97 to \$300 a year for each inmate. However, it must be recognized that, owing to the different methods of bookkeeping, great allowance must be made in comparing costs.

¹ Report of Bureau of Education on Statistics of Schools for the Feeble-minded, 1912-18.

The apparently low cost in many of the institutions is due to the saving in cost of food by the use of the produce of farms operated by the institutions—the work being done by adult inmates—and the earnings from the sale of surplus farm products. Many institutions also have industrial departments in which they manufacture much of the necessary wearing apparel and house furnishings.

According to figures published by the Board of Charities of the District of Columbia the per capita cost of maintenance of mental defectives in the various institutions, including current expenditures and salaries, is as follows:

Institution.	Per capita cost.
Government Hospital for the Insane.....	\$240
Home for the Aged and Infirm.....	153
National Training School for Girls.....	286
National Training School for Boys.....	233
Industrial Home School.....	188
Brown Home (rate to Board of Children's Guardians).....	120
Pennsylvania Training School (rate to Board of Children's Guardians).....	250
Virginia Training School (rate to Board of Children's Guardians).....	250
Training School at Vineland (rate to Board of Children's Guardians).....	250 to 300

There are 31 individuals reported in institutions providing temporary shelter mainly. It is fair to assume that the community spends at least \$200 a year for each of these persons, as many of them are in hospitals where the cost greatly exceeds this. Figuring the cost for the number of inmates in the various nonappropriate institutions at the time of the investigation according to the above per capita figures, the total cost for maintenance for a year would be approximately \$56,371. The Board of Children's Guardians reports expenditures for the year 1914 of \$21,572.64 for the care of feeble-minded in the three training schools and those boarded out. The total annual expense for the 370 mental defectives cared for in institutions or under public supervision is therefore approximately \$77,943. This does not include the amount spent by private charity nor the cost of training in the public schools. The annual per capita cost of training in the atypical schools is given as \$74.10 and in the public schools as \$32.62.

The present annual per capita expenditure for mental defectives of the District of Columbia boarded in institutions or under the supervision of public authorities is approximately \$211. More than half of the number of defectives in institutions are inmates of the Government Hospital for the Insane. These patients do not in general need the care of expert physicians and the expensive type of custodial buildings. The per capita cost of maintenance in this and other nonappropriate institutions is undoubtedly higher than it would be in an institution of the kind proposed. In considering per capita cost of maintenance it is important to note that the \$192 annual per capita quoted above as being the average for 30 insti-

tutions represents expenditures in institutions most of which are located in northern States, where the rigors of the climate make the expense for fuel and clothing greater than would be required in a milder climate.

ECONOMY OF ADEQUATE PROVISION.

Investigations of mental defectives have proved conclusively that the burden is increased indefinitely by the failure to prevent the transmission of defects that are known to be heritable. It has been found that mentally defective women are in a very large number of cases the mothers of illegitimate children, and that these children have to be cared for by the public because of mental defects or antisocial instincts. The record of one family charted by the research branch of the New Jersey Department of Charities and Corrections illustrates the cost of lack of prevention. An imbecile woman married a moron. They had 3 feeble-minded children, the records of 2 of whom were not obtained. The third, frequently an inmate of an almshouse, had 6 illegitimate children, of whom 4 died in infancy. One of her feeble-minded daughters had 2 feeble-minded children and another child who died in infancy. Her other daughter had 10 feeble-minded children, 7 of whom were cared for in almshouses or by State authorities, 2 of the others dying when very young. In three generations this one imbecile woman had 17 feeble-minded progeny whose records were obtainable, 10 of whom were cared for in almshouses at times but not permanently segregated. Besides this immediate line the family connections of this woman include 259 feeble-minded persons in five generations, the majority of whom were dependent on the public for maintenance. Many similar instances are recorded by State investigating bodies and research departments of institutions. The social economy that must result from the prevention of transmission of defect can not be estimated in figures, but it is hardly to be questioned that the investment would result in savings compounded with each generation.

Quoting from an editorial in the Survey of March 2, 1912, "The greatest need of all is for more institutional care. When this has been brought about in every State we shall witness a great gaol delivery even more significant than that which has followed the discontinuance of imprisonment for debt, or the abolition of the saloon, or the introduction of the probation and parole system. Care for the feeble-minded adequately for a generation and expenditures for prisons, reformatories, police, fires, hospitals, and almshouses will be enormously reduced, or, what is even better, expenditures for such purposes will be accomplishing desirable tasks which we have not yet had the courage to undertake. Biology and economics unite in demanding that the strains of feeble-mindedness shall be eliminated by the humane segregation of the mentally defective."

APPENDIX.

CLASSIFIED INSTANCES OF MENTAL DEFECTIVES IN THE DISTRICT OF COLUMBIA FOR WHOM INSTITUTIONAL CARE IS DESIRABLE.

The following pages contain concrete illustrations of various phases of the problem of mental defect. These hundred cases represent only a few of the large number of children and adults for whom at present no provision is made. No attempt has been made to present all the information that might have been obtained in regard to these cases. Records of all of the 798 cases enumerated, as well as a large number of others reported to the bureau since this report was prepared, are on file in the Children's Bureau.

The attempt was made to classify these instances according to the nature of the problem involved, but it is obvious that there is much overlapping. It will be found that each individual mentioned suffers from many of these factors, not from one only. For example, the child who is here classed as a delinquent is also found to be of defective stock, the child of a morally delinquent mother, and too defective to attend school, etc. This intertwining of bad conditions, evil inheritances, weaknesses, and antisocial tendencies characterizes the problem of mental defectives. All that society can do is to provide the training and care that will save them from suffering from the effects of their misfortune and from contributing to the cycle of defectiveness, dependency, and delinquency.

I. MENTAL DEFECT AS A CAUSE OF DEPENDENCY.

No. 60. Male, 31, white	} Husband and wife.
No. 59. Female, 29, white	

Married in 1907. The records of the Board of Children's Guardians show that the man was reported to them by a judge as feeble-minded in 1898, at the age of 15. He was sent to the school for feeble-minded at Elwyn, Pa., but ran away after a month and a half. Has been working irregularly since then.

The woman's mother, who came from a wealthy family, was epileptic and died in an insane asylum. She left considerable money to the family, but the father, a gambler and swindler, soon squandered it. When the daughter was quite young a physician, believing her epileptic, recommended that she be placed in an institution. His advice was not followed. The family moved to Washington in 1904. The girl was sent to work in a laundry, but was too incompetent to be kept. She applied for admission at the Young Women's Christian Home, as her father and stepmother abused her. Becoming intimate with a wild, immoral girl, she left the home and went to live near the arsenal. She again applied for admission to the home, but could not be kept there on account of her unclean condition. In January, 1906, she applied to the Board of Charities, and was sent to the Florence Crittenton Mission, where she gave birth to a stillborn child.

After leaving the mission she worked as a chambermaid in a hotel and soon married a mentally defective man, also employed there. For the next few years the records of the Associated Charities concerning this couple and their offspring are voluminous. The man lost his place a few days before he was married and was unable to support his wife. Sometimes his mother would let the couple stay at her house, and some-

times they rented a room; but the woman screamed and cursed and used vulgar language to such a degree that no one could keep them very long. Their rent was paid by a church for a considerable time. In May, 1908, the woman left her husband, and soon after she and her stepmother had him arrested for improper conduct.

In July she went back to her husband. Shortly afterwards she was sent to the Washington Asylum Hospital, where a child was born. She was sent to this hospital for the purpose of observation to determine whether she could be committed to the Government Hospital for the Insane. The doctor pronounced her an imbecile or high-grade idiot. Various persons have made affidavits to the effect that she is insane, but she has not been committed to the hospital, and her husband does not wish her to go there.

The husband has occasionally obtained a job, but never keeps it long. He has obtained a good deal of money through a story of a sick wife and baby. Almost all the charitable organizations of the city seem to have had dealings with the family at one time or another. The family are constantly moving on account of nonpayment of rent, have almost no furniture, and live in a very shiftless manner.

Of the five living children, a boy 6½ years old is with the man's mother and sister, but not yet in school; a girl 5½ years old, mentally defective, is in Washington City Orphan Asylum; a boy, 3½ years old, and two girls, 2½ and 1½ years old, are with the parents. None of the children appear bright, and the girl 2½ years of age is far from normal.

The man is now working in the railroad yards, but it is said he loses about one-third of his time on account of hernia. Neighbors state that the woman beats the children. She is away from home most of the day, and for several weeks past the man has hired a colored woman to stay with the children.

During the eight years this couple have been married six children have been born to them and the woman is again pregnant.

No. 591. Male, 18, colored.

Father deserted family, and the five children were taken in charge by the Board of Children's Guardians 11 years ago. This boy was placed in a boarding home and later placed on trial for indenture, but his mind was so defective that he could not do much. He was sent to school, but at 10 years of age had not learned his letters. He was finally placed in the children's temporary home as feeble-minded, but escaped in July, 1914, and is now at large. He has secondary syphilis.

The mother is said to be mentally defective. The oldest sister was sent to the reform school, where she stayed until she reached her majority and was discharged. The second sister had an illegitimate child, and was dishonest and untruthful. An older brother was sent to the Industrial Home School, and ran away eight times. A younger brother was also placed in the Industrial Home School.

No. 367. Male, 39, white. }
No. 368. Female, 33, white. } Husband and wife.

No. 369. Male, 8, white, their son.

Both mentally defective, as is also their son, 8 years of age. A girl 6 years old is thought to be defective, although she attends the regular school. The boy is in an atypical school. Their second child was stillborn, and they lost a baby in the summer of 1914.

The Associated Charities has a long record of the family; the man is continually losing his job and always trying to borrow; the family is dirty and shiftless. They live in the basement of an old house and have scarcely any furniture. The man has been in the hospital a number of times. The wife has been in the Florence Crittenton Mission for temporary shelter. The husband was sent to the Washington Asylum Hospital about a year ago; his trouble proved to be syphilis; he is now being treated at an eye, ear, and throat hospital. The man's parents are respectable people, and live fairly comfortably. They have helped the man somewhat, but are unable to continue doing so.

No. 655. Female, 25, colored.

Orphaned at an early age. Was found living with a woman who had a workhouse record and was unfit to have the care of a child, and was placed in the Washington Asylum Hospital for mental observation in 1902. It was decided she was not a suitable case for the epileptic ward of the Government Hospital for the Insane. Was placed in temporary home for children; when she became of age in 1907 she was transferred to the feeble-minded list of the Board of Children's Guardians.

No. 578. Female, 32, colored.

Has had three illegitimate children. Was living in one small room with her mother, brother, and her three children, in an indescribably filthy condition. The children were committed to the Board of Children's Guardians in 1910 and the father ordered to pay \$4 a month for their care. The oldest boy, almost 15 years of age, has been put on probation by the juvenile court. He and his brother, aged 13, were kept in a boarding home until December, 1912, when they were placed for indenture.

No. 20. Female, 21, white.

Epileptic and mentally defective. Her father was placed in an insane asylum not long after he was married, but improved and was allowed to leave. Several children were born in the family during the time he was at large. He is now in the asylum again. An Associated Charities agent acquainted with the family states that the mother and three children are also defective, and it is said the family has received help from almost every almsgiving church and society in the city. The girl had epileptic seizures up to the age of 14, when they ceased. Her left arm is paralyzed. She "runs around" with an imbecile man who lives in the neighborhood.

No. 25. Male, 36, white.

Is able to work, but is a "dope fiend" as well as mentally defective, and has been at the Home for the Aged and Infirm for a year; is likely to remain there for life.

II. MENTALLY DEFECTIVE WOMEN WHO ARE MORALLY DELINQUENT.

No. 461. Female, 33, white.

This woman has been known to charity organizations since 1903, when she was admitted to the hospital, where her baby was born. She was the widow of a man said to have been feeble-minded and who had died of tuberculosis a year or two previously. By him she had had three children, all of them now dead. She admits she has led the life of a prostitute.

This woman has been in the Florence Crittenton Mission and in the Washington Asylum Hospital several times. While at the hospital in 1910, being treated for syphilis, she met a man who was being treated for tuberculosis, and when she told him of her condition he agreed to marry her and take care of her. He was a man with a jail and workhouse record, an habitual drunkard with vile habits, and had had tuberculosis for several years.

They were married in March, 1910. Three months later she applied at the office of the Associated Charities for assistance; she was terribly bruised from beatings by the drunken husband. They have had two children; one died at birth, the other is a ward of the Board of Children's Guardians. Numerous attempts have been made to place the woman in the Government Hospital for the Insane, where she was once sent to await trial for insanity. Physicians testified that she was an imbecile, with the mentality of a child of about 6 or 7 years, although she is now 33; that she was unable to care for herself, and that she should be permanently segregated for her own sake and the protection of society.

The woman claims she has had nine children; all except one have died from neglect. Her husband is now in the tuberculosis hospital. The woman has been in the tuberculosis hospital for treatment, but refused to remain.

No. 102. Female, 21, white.

Has two illegitimate children, 3 and 2 years old, respectively. Was sentenced to 360 days for nonsupport of child; youngest child a ward of the Board of Children's Guardians; older child adopted out from the founding asylum. Woman was recently arrested for being dressed in man's clothing; she is now in jail awaiting sentence.

No. 76. Female, 19, white.

At Florence Crittenton Mission with baby 1 month old. Has another child 2 years old, now cared for by her mother. Both are illegitimate.

No. 75. Female, 26, white.

No home. Has illegitimate child 14 months old, born at Florence Crittenton Mission; another illegitimate child, a boy of 5 years, is at St. Joseph's Orphan Asylum. He is not normal.

No. 106. Female, 30, white.

Epileptic. Was in Florence Crittenton Mission three years. Has one child 2½ years old; boarded out.

No. 643. Female, 18, colored.

Has "falling spells," probably epilepsy. Had an illegitimate child which died about a year ago. Was married the past summer.

No. 249. Female, 19, white.

Has no parents. Has illegitimate child 8 months old; is in service and is keeping child.

No. 64. Female, 35, white.

Now at Florence Crittenton Mission with 4-months-old baby, but they can not keep her long. Habits unclean. Has a child 2 years old living with her sister in Virginia. Comes from a good family. Her sister has a mentally defective boy.

No. 582. Female, 33, colored.

Has had two illegitimate children, last one born June 2, 1913. An older child is in an institution in New York City. Younger child is in charge of the Board of Children's Guardians.

No. 586. Female, 28, colored.

Is badly crippled. Has had three illegitimate children; the first one is dead; the second one's whereabouts unknown. Her brother-in-law is reported to be the father of the third child, born in 1911; she is now at the Home for the Aged and Infirm.

No. 189. Female, 22, white.

Badly in need of institutional care. A child, colored, was born in 1909 in Florence Crittenton Mission and is now boarded out by Board of Children's Guardians with colored family. Woman now working in Bruen Home.

No. 140. Female, 27, white.

Mother died when girl was a baby. Has kept house for men since she was a small girl. Lived with her brother in Langdon and there had a child by him in 1911. They were threatened with arrest and came to Washington, where her brother committed suicide soon after.

No. 676. Female, 35, white.

Crippled. Two illegitimate children are being cared for by her brother and sister.

No. 787. Female, 30, white.

Paralytic and crippled. Was pronounced feeble-minded by a physician, taken charge of by Board of Children's Guardians in 1896, and boarded out. In 1905 had an illegitimate child whose father she claimed was the man in the family keeping her. This man agreed to support both, but has since died. Woman now again being boarded out by Board of Children's Guardians.

No. 649. Female, 21, colored.

Epileptic. Girl's mother had 15 or 18 children. This girl and a younger sister have had illegitimate children.

No. 137. Female, 26, white.

Has had three illegitimate children, two of them now dead. Woman is in service and has the third child with her.

No. 237. Female, 24, white.

Has had two illegitimate children. Her mother is thought to be mentally defective.

No. 639. Female, 28, colored.

Very defective mentally. Has had three illegitimate children and is soon to have a fourth. Lives with a man said to have a wife and children in the city. The three children are boarded out by the Board of Children's Guardians.

No. 799. Female, 35, white.

Taken into a family from the foundling asylum when quite young; afterwards sent to Industrial Home School. When about 16 years of age was sent to the Bruen Home and later gave birth to child which died soon afterwards. Lived at the Bruen Home for several years as a helper. Appears idiotic. Was married during the past winter.

III. CHILDREN TOO DEFECTIVE TO ATTEND SCHOOL.

No. 93. Male, 11, white }
No. 94. Male, 13, white } Brothers.

Have been in public school and are now in parochial school, but the principal says it is impossible for them to learn. There are nine children in the family; all but these two appear normal. The family have almost no furniture and the house is very dirty. The children seen by the visitor were dirty and ragged.

No. 479. Female, 10, white.

Attended a parochial school, but was so defective she could not be allowed to be with the other children; would eat food from the garbage pails in preference to her own lunch. Has recently been sent to the Government Hospital for the Insane.

No. 16. Female, 7, white.

Mongolian type of feeble-minded. Very defective; badly in need of institutional care.

No. 371. Female, 16, white.

Not now in school. Her behavior has caused neighbors to report case frequently to attendance officer. The mother is also defective, and the father a "dope fiend."

No. 534. Male, 15, colored.

Has been in Government Hospital for the Insane; can not read; can count and make change. Did good work in chair caning and basketry when in an atypical school; now working as an errand boy in a grocery store.

No. 181. Male, 12, white.

Was removed from Virginia Training School in July, 1914. Is an epileptic and needs care; is a nuisance in the neighborhood.

No. 235. Male, 16, white.

Paralyzed on left side. Never attended school; does not know the alphabet; sells papers; lives with an aunt.

No. 541. Female, 9, colored.

Too defective mentally to go to school; the mother, a widow, is a day worker and has to employ some one to care for the child while she is away.

IV. CHILDREN IN SPECIAL SCHOOLS TOO DEFECTIVE TO BENEFIT BY SUCH TRAINING.

No. 539. Female, 14, colored.

In an atypical school; has no idea of what has been taught when the lesson is over. A sister also defective.

No. 375. Female, 16, white.

Has attended an atypical school, but can not learn.

No. 572. Female, 7, colored.

Mental condition so bad she could not profit by attendance at an atypical school.

No. 565. Female, 12, colored.

Goes to atypical school when older sister can take her, but mentally incapable of benefiting by school attendance; physically defective also.

No. 222. Male, 8, white.

An atypical-school teacher says she is unable to teach the boy anything.

No. 219. Female, 14, white.

Imbecile. Can not talk; grins when asked questions. Was kept in first grade of regular school six years and then sent to an atypical school at the age of 13. Did not know how to go up or down stairs when she came to the atypical school, but has now been taught to put up one foot after the other.

No. 9. Female, 14, white.

Epileptic and feeble-minded. Has been in an atypical school only a couple of weeks. Uses bad language and is likely to demoralize the other children.

No. 228. Male, 14, white.

Teacher in atypical school reported that she felt she had been unable to instruct him during the three years he had been in the school.

No. 338. Female, 13, white.

Plainly an institutional case. At the age of 7, when she entered the atypical school, she could not get up or down without assistance. It took three months to get her fingers exercised so she could hold a pencil. Can now understand and answer questions fairly well. Has a brother who is very defective.

No. 153. Male, 18, white.

Is about five years old mentally, although as large as a man; attends atypical school.

V. MENTAL DEFECTIVES WHOSE FAMILIES ARE UNABLE TO PROVIDE PROPER CARE.

No. 23. Male, 18, white.

This boy and his brother, 16 years of age, also very defective, belong to a family of seven children, four of whom are living. Two older brothers are working. This boy attended an atypical school for three years but could not learn and had a bad influence over the other boys. Can do errands, but can do no work for which he could be paid. His mother thinks she can see some improvement in his condition. The 16-year old boy has never been to school. The two boys are a great care to their mother, who would be glad of a place to put them where they could be cared for and taught. The family is unable to pay full tuition, but could pay something. They are in moderate circumstances and have a neat home. The boys hang around the public school. They are often annoyed by the other children and are a menace to the neighborhood, but the mother says she can not keep them in the house all the time.

No. 488. Male, 17, white.

Was unable to progress further than the fourth grade in school; has not been to school for three years; can not keep a position; has one brother at the Virginia Training School; two other brothers are normal. The family are in comfortable circumstances, but the mother worries constantly for fear of what he may do as a result of his uncontrollable temper. His parents would like to put him in an institution.

No. 427. Male, 9, white.

Appears perfectly normal for about two weeks each month, then gradually goes to pieces and frequently goes away from home for two or three days; when found claims he has eaten bread and milk taken from doorsteps and has slept in vestibules. Mother would like to put him in an institution. He has an aunt who is mentally defective—
No. 64.

No. 754. Male, 10, colored.

Can not stand or walk and his speech is limited to the words "bread" and "water," and a sound that is understood to be his sister's name; can not feed himself; sits in a chair and works his arms and legs spasmodically and laughs; has just been returned from Washington Asylum Hospital, as nothing could be done for him there; mother is a widow and works out; she has two other children.

No. 317. Male, 25, white.

Has never been able to attend school; mother spent one winter trying to teach him his alphabet, but he does not know it now; does not do anything; parents are unable to pay for institutional care, although they could pay part; he is too old for existing institutions. The mother is breaking down under the long strain, and the doctor has said the son must be put somewhere. He has one sister who is normal.

No. 741. Male, 38, colored.

Can not talk, but can feed himself; he can chop wood, but is not competent to go on errands. He is boarded and cared for by his brother.

No. 194. Male, 34, white.

Very defective; can not read or write nor do any work; he is cared for by his widowed mother and sister.

No. 408. Female, 13, white.

Very much in need of institutional care; can not talk or be made to learn anything; not in school.

No. 647. Male, 6, colored }
No. 648. Male, 6, colored } Twins.

Both boys are unable to walk or talk; family very poor.

No. 412. Female, 11, white.

Was in second grade of regular school; sent to atypical school, but has recently been excluded from school by the board of health. No teacher will keep her because of her bad habits. The mother is a "dope fiend."

No. 82. Male, 15, white.

Not in school; should be in an institution; father is said to be mentally defective.

No. 425. Male, 20, white.

Harmless, but very defective mentally; helps at home and takes care of the baby; needs institutional care.

No. 774. Female, 8, colored.

Mentally incapable of ever attending school; could probably be taught to do hand-work; father is sickly and partially incapacitated for work; mother takes in washing. There are nine other children.

VI. DEFECTIVE DELINQUENTS DETRIMENTAL TO THE WELFARE OF THE COMMUNITY.

No. 348. Male, 10, white.

Has been examined and declared to be in need of institutional care. Has been before the juvenile court for stealing.

No. 30. Female, 18, white.

Mother is dead; there are nine children; older sister is in charge of home. This girl is a good housekeeper and has a sweet disposition, but has bad influence over the other children of the family. A great problem to the father.

No. 303. Male, 14, white.

Orphan. Unable to study, but works well under direction; was boarded out with a family for two or three months, but was returned to an asylum in bad condition; a great detriment to other children, who also worry him into a very nervous condition.

No. 88. Female, 8, white.

Attends an atypical school. Was assaulted when 7 years of age and is in constant danger owing to her mental condition.

No. 505. Male, 14, white.

Has attended an atypical school. This boy and a brother three years younger have been in the Industrial Home School; have also been before the juvenile court for stealing. Boy has been in Children's Hospital three times. The family has been helped for years by public relief agencies. There apparently is insanity in the family. The father has been in hospital for observation, but a physician declared he was not insane; he is an habitual drunkard; has been in the workhouse; his father is said to have been insane at the time of his death, and a brother is insane at times. There are five children in the family; the baby is said to be abnormal.

No. 300. Male, 25, white.

Never learned to read or write. Has served sentence for larceny and has viciously assaulted his mother.

No. 97. Male, 20, white.

Feeble-minded and very immoral and has evil tendencies. Was doing fourth-grade work at the age of 16. Now working.

No. 358. Male, 19, white.

This boy was recently sent to the Home for the Aged and Infirm because he would not work and was considered an undesirable person to have at large. He left after having been there 11 days and now is wandering the streets. The family does not know where he is. The father deserted the family three years ago; the mother is employed in a factory. There are four children; the oldest girl is in the Industrial Home School; the second girl is in the Pennsylvania Training School; and a boy is in the National Training School.

VII. MENTAL DEFECTIVES WHO ARE ALSO PHYSICALLY DEFECTIVE.

No. 547. Male, 23, colored.

Epileptic. Unable to learn; some of the best physicians in Washington and Baltimore have failed to improve his physical condition; has to be attended like a baby at times.

No. 312. Male, 16, white.

Epileptic. Declared to be in a state of mental deterioration and in need of special institutional care.

No. 627. Female, 10, colored.

Is blind and can not talk, but understands what is said to her; can not feed herself or care for herself in anyway; has been boarded out by the Board of Children's Guardians since she was a year and a half old.

No. 622. Male, 15, colored.

No father; mother works out by the day, and brother, 13 years old, is often kept out of school to care for him; sometimes neighbors help; partially paralyzed, but can walk and understands what is said to him. Does not dress himself and does not talk; has idiotic expression; the home seems comfortable; no other children.

No. 665. Female, 11, colored.

Badly crippled; uses crutches; never attended school.

No. 149. Male, 13, white. }
No. 150. Male, 13, white. } Twins.

In an atypical school; these boys seem to have no control of their limbs; they reel down the steps as if they were drunk; they are brought to school in a wagon; another brother slightly defective.

No. 781. Female, 18, white.

Unable to walk or control her limbs; has been two years in hospital; was sent to the Home for the Aged and Infirm three years ago.

No. 791. Female, 12, white.

Very defective physically; can not make any intelligible signs nor indicate her wants; is kept out of doors in an invalid chair during the day; parents able to provide for her while they live.

VIII. MENTALLY DEFECTIVE WOMEN LIKELY TO BECOME VICTIMS OF IMPROPER TREATMENT.

No. 143. Female, 20, white.

Has attended an atypical school and learned to write her name, but was withdrawn by her parents because girls in the school who were older and less defective taught her undesirable things and men spoke to her on the street; now staying at home.

No. 3. Female, 17, white.

Has been in an atypical school, but can not go and come alone; she has given the worker in charge of a playground a great deal of trouble; grown men would hang around the playground and cause annoyance until the worker would be compelled to take the girl home; her mother is dead.

No. 470. Female, 16, white.

Has been brought before the juvenile court for bad behavior on the street; she had an Italian arrested, claiming he was the father of her child.

No. 790. Female, 16, white.

This girl lives with her sister, but the latter can not restrain her and is unwilling to keep her; she was found in the company of a man in Baltimore by a deaconess and sent to Sibley Memorial Hospital, where she remained three months, but was dismissed from there, as she was not a hospital patient; the sister has since applied for readmission for her, but was refused.

No. 460. Female, 23, white.

The mother is dead; father a drunkard; she lived with married sister until turned out because of her behavior and influence; would call men in from the street to introduce them to her nieces; she was sent by the Board of Charities to Florence Crittenton Mission—for lack of a better place—after she had been arrested, having applied for admission to a rooming house after midnight.

No. 238. Female, 17, white.

Has attended an atypical school, but was removed by parents because there was but one other girl in the school and because she learned bad language from the boys; she has a violent temper; her mother would be glad to put her in an institution, as she is fearful of what may happen to her; the family could pay something for her care.

No. 65. Female, 21, white.

Has been too defective to attend school; unable to go about alone; parents are able to care for her at present, but are constantly worried for fear of what may happen to her.

No. 70. Female, 16, white.

The mother thinks it unwise for her to attend the atypical school, as she believes it unsafe for her to go to and from school alone. Girl has been in Pennsylvania Training School, but parents insisted on having her brought home. They would be willing to put her in an institution if there were one near enough for them to visit her.

IX. ADULTS WHO MIGHT HAVE PROFITED BY INSTITUTIONAL TRAINING.

No. 685. Male, 20, colored.

Has never been in school; should be in an institution; works about the house; can sweep and dust; can not go about alone; can do errands, if not sent for more than one thing at a time; family in moderate circumstances.

No. 587. Male, 16, colored.

Epileptic and mentally defective; never advanced beyond the first grade in public school; was a normal child until 7 years of age, when he had scarlet fever; is now in Government Hospital for the Insane in ward with 25 or 30 others; helps clean the ward sometimes, but would be able to do other work if it could be provided; is very much dissatisfied with his surroundings and begs to be brought home.

No. 269. Male, 21, white.

Epileptic. His condition was caused by an attack of spinal meningitis at the age of 9 months. He is melancholy, as he realizes that he is not normal. An institution where he could be taught an occupation and be employed would be a great benefit. Family would be glad to put the boy in an institution if there were one nearby. He is a constant worry to his mother.

X. CASES INDICATING DEFECTIVE STOCK.

No. 715. Female, 5, colored.

In Government Hospital for the Insane. Father has been under observation at Washington Asylum Hospital. Grandfather in Government Hospital for the Insane since 1891. Great-aunt (on father's side) died in the Government Hospital for the Insane in 1893.

No. 373. Male, 40, white.

Painter. Has epilepsy. Reported to be of low moral character. Wife tubercular. A son of 10 has shown signs of feeble-mindedness. A daughter of 8 has very bad habits.

No. 789. Male, 11, white.

Father died in insane asylum. The boy has been recommended for the Vineland Training School by his physician.

No. 389. Female, 16, white.

In an atypical school. Her mother said to be defective, as is also the mother's sister.

No. 361. Female, 18, white.

In Virginia Training School. Mother is in Government Hospital for the Insane (feeble-minded); brother and sister in Industrial Home Training School.

No. 310. Male, 10, white.

In Pennsylvania Training School, sent by Board of Children's Guardians. Mother (case 311) now in Government Hospital for the Insane (feeble-minded).

No. 90. Male, 28, white.

Unable to work on account of mental condition; has a sister in the Government Hospital for the Insane.

No. 426. Male, 14, white.

Attends atypical school; knows almost nothing. Has a defective brother. Mother is also considered defective.

No. 123. Male, 8, white }
No. 124. Female, 10, white } Brother and sister.

Parents both defective; 5 children, all considered defective. Parents will not allow them to attend atypical school, and teachers in the regular schools will not keep them.

ADDITIONAL COPIES

OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
5 CENTS PER COPY

596.237

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, CHM

CHILD-WELFARE EXHIBITS
TYPES AND PREPARATION

BY

ANNA LOUISE STRONG, Ph. D.

MISCELLANEOUS SERIES No. 4

Bureau Publication No. 14



WASHINGTON
GOVERNMENT PRINTING OFFICE
1913

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, CLM

CHILD-WELFARE EXHIBIT
TYPES AND PREPARATION

BY

ANNA LOUISE STRONG, PH. D.

MISCELLANEOUS SERIES No. 4
Bureau Publication No. 14



WASHINGTON
GOVERNMENT PRINTING OFFICE
1913

PUBLICATIONS OF THE CHILDREN'S BUREAU.

Annual Reports:

First Annual Report of the Chief, Children's Bureau, to the Secretary of Labor, for the fiscal year ended June 30, 1913. 20 pp. 1914.

Second Annual Report of the Chief, Children's Bureau, to the Secretary of Labor for the fiscal year ended June 30, 1914. 10 pp. 1914.

Care of Children Series:

No. 1. Prenatal Care, by Mrs. Max West. 41 pp. 8d ed. 1912. Bureau publication No. 4.

No. 2. Infant Care, by Mrs. Max West. 87 pp. 1914. Bureau publication No. 8.

Dependent, Defective, and Delinquent Classes Series:

No. 1. Laws relating to Mothers' Pensions in the United States, Denmark, and New Zealand. 162 pp. 1914. Bureau publication No. 7.

No. 2. Mental Defectives in the District of Columbia: A brief description of local conditions and the need for custodial care and training. 79 pp. 1915. Bureau publication No. 13.

Infant Mortality Series:

No. 1. Baby-saving Campaigns: A preliminary report on what American cities are doing to prevent infant mortality. 68 pp. 4th ed. 1914. Bureau publication No. 3.

No. 2. New Zealand Society for the Health of Women and Children. An example of the methods of baby-saving work in small towns and rural districts. 19 pp. 1914. Bureau publication No. 6.

No. 3. Infant Mortality: Results of a field study in Johnstown, Pa., based on births in one calendar year, by Emma Duke. 63 pp. and 9 pp. illus. 1915. Bureau publication No. 9.

No. 4. Infant Mortality in Montclair, N. J.: A study of infant mortality in a suburban community. 36 pp. 1915. Bureau publication No. 11.

Industrial Series:

No. 1. Child Labor Legislation in the United States. — pp. 1913. Bureau publication No. 10.

No. 2. Administration of Child Labor Laws:

Part I. Employment Certificate System, in Connecticut. 69 pp. 1913. Bureau publication No. 12.

Miscellaneous Series:

No. 1. The Children's Bureau: A circular containing the text of the law establishing the bureau and a brief outline of the plans for immediate work. 6 pp. 1912. Bureau publication No. 1.

No. 2. Birth Registration: An aid in preserving the lives and rights of children. 20 pp. 8d ed. 1914. Bureau publication No. 2.

No. 3. Handbook of Federal Statistics of Children: Number of children in the United States, with their sex, age, race, nativity, parentage, and geographic distribution. 106 pp. 2d ed. 1914. Bureau publication No. 5.

No. 4. Child-Welfare Exhibits: Types and preparation, by Anna Louise Strong, Ph. D. 55 pp. and 16 pp. illus. 1915. Bureau publication No. 14.

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

CHILD-WELFARE EXHIBITS

TYPES AND PREPARATION

BY

ANNA LOUISE STRONG, Ph. D.

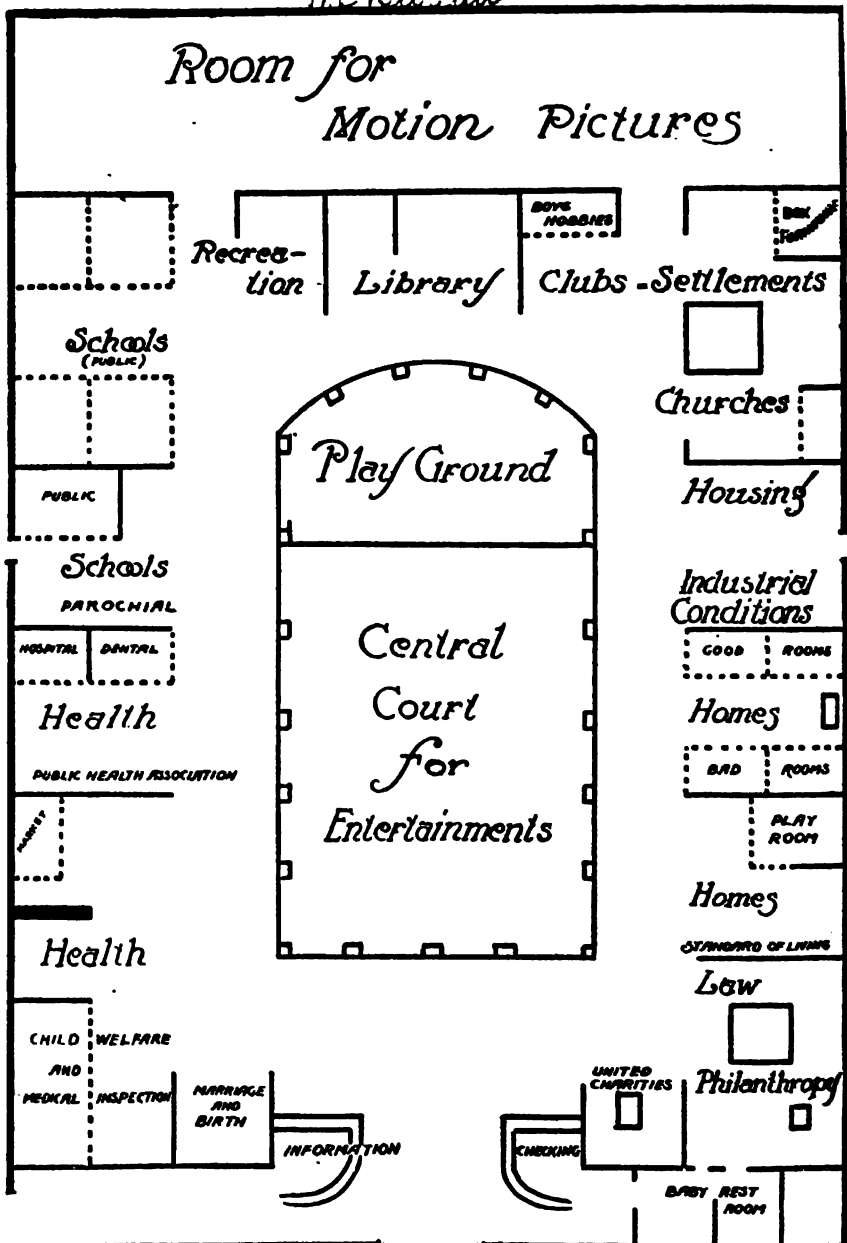
MISCELLANEOUS SERIES No. 4

Bureau Publication No. 14



WASHINGTON
GOVERNMENT PRINTING OFFICE
1915

The Currier



FRONTISPIECE.—TYPICAL FLOOR PLAN OF A CHILD-WELFARE EXHIBIT (HELD IN ROCHESTER), SHOWING CENTRAL COURT, WIDE AISLE, LARGE SECTIONS ARRANGED BY SUBJECTS.

TABLE OF CONTENTS.

	Page.
Letter of transmittal.....	5
Introductory.....	7
Scope of the exhibit.....	8
Use of traveling exhibits.....	10
Wall panels.....	12
Infant-welfare exhibit.....	11-13
Baby in the home.....	12
Exhibit on food.....	13
Directory of organizations.....	13
Children's health conference.....	13-19
Method of organization.....	14
Equipment needed.....	16
Baby week.....	16
Permanent centers—State circuits.....	17
Exhibit on children's interests.....	19-23
Method of organization.....	19
Home-play exhibit.....	21
Supplementary exhibits.....	22
State-wide exhibit.....	22
Recreation survey.....	22
Community child-welfare exhibits.....	23-32
Committee organization.....	24-27
Finance, or ways and means.....	24
Publicity.....	24
Installation.....	25
Hospitality and explainers.....	25
Program.....	26
Exhibiting committees.....	26
Floor plans.....	27
Unit construction.....	28-31
Construction of traveling exhibits.....	28
More permanent construction.....	30
Color scheme.....	31
Control by executive office.....	32
Suggestions for exhibitors.....	32-46
Wall exhibits.....	33-36
Lettering.....	34
Photographs and illustrations.....	34
Transparencies.....	35
Three-dimension exhibits.....	36-42
Models.....	36
Moving models and electrical devices.....	39

Suggestions for exhibitors—Continued.		Page.
Living exhibits.....		42-46
Explainers.....		42
Demonstrations.....		43
Program committee.....		44
After the exhibit.....		46
Appendix 1. Child-welfare exhibits owned by State departments, January 1, 1915.....		49
Appendix 2. Record of Children's Health Conference.....		52
Appendix 3. Table of weights and measures.....		54
Appendix 4. Announcement and entry form of Seattle Junior Exhibition.....		55
Appendix 5. Bureau's exhibit at Panama-Pacific International Exposition....		57

ILLUSTRATIONS.

- Frontispiece.** Typical floor plan of a child-welfare exhibit (held in Rochester), showing central court, wide aisle, large sections arranged by subjects.
- No. 1.** Children's Health Conference. Doctor, nurse, parent, and child are separated from the general public by a glass wall through which the examination can be seen.
- No. 2.** Home-play exhibit.
- No. 3.** Balance beam and slide in home-play exhibit.
- No. 4.** Wall panel from the exhibit of the Children's Bureau, showing the use of cartoons.
- No. 5.** Wall panel from the exhibit of the Children's Bureau, showing an arrangement of photographs and statements pasted on a larger background which forms the unit of construction.
- No. 6.** Wall panel from the exhibit of the Children's Bureau, showing a combination of photographs and cartoons.
- No. 7.** Wall panel on infant care.
- No. 8.** Wall panel on infant care.
- No. 9.** Wall panel on prenatal care.
- No. 10.** Model made for a child-welfare exhibit by a vocational class in the Rochester public schools.
- No. 11.** Dental exhibit comprising photographs, statements, lantern lecture, dental equipment, models of teeth, and a demonstration of dental examination, all in one 8 by 12 space, made by the Rochester Dental Society.
- No. 12.** Starting a fly campaign at the Rochester Child-Welfare Exhibit. A combination of "living exhibit" with charts.
- No. 13.** A good exhibit for a library in a community child-welfare exhibition is a children's room in operation.
- No. 14.** Diagram of wall panel composed of cards.
- No. 15.** Cross section of an illusion. (Side view with door removed.)

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, D. C., September 20, 1915.

SIR: I transmit herewith a bulletin on Child-welfare Exhibits: Types and preparation, by Dr. Anna Louise Strong, exhibit expert of the Children's Bureau.

The exhibit has proved, in recent years, an important means for the widespread publication of facts. Especially effective have been the uses of this form of publication in relation to child and infant welfare. The Children's Bureau receives many letters of inquiry from organizations and individuals desiring to hold such exhibits; and it is in answer to inquiries of this kind that this bulletin has been prepared.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

Hon. WILLIAM B. WILSON,
Secretary of Labor.

CHILD-WELFARE EXHIBITS.

INTRODUCTORY.

In the past five years there have occurred in nearly every part of the United States three distinct series of exhibits all dealing with subjects which may be classed under the general head of child welfare. The New York Child-welfare Exhibit, held in January, 1911, aimed to show all influences affecting the welfare of children in the city of New York, and gave rise to a series of similar exhibits in Chicago, Kansas City, Northampton, St. Louis, Buffalo, Montreal, Louisville, Providence, Knoxville, Rochester, New Britain, Peoria, Toledo, Seattle, Indianapolis, and Dublin (Ireland), and many smaller places.

The Philadelphia Baby-Saving Show, in May, 1912, gave its attention to one aspect of child welfare—that of baby saving, covering this in much greater detail than had previously been done. This show led not only to other baby-saving exhibits but to an enrichment of the series of larger child-welfare exhibits as far as the subject of infant welfare was concerned. A further enrichment came from the Junior Exhibitions, held in Cleveland and San Francisco, a display on a large scale of objects made by children; and from the boys' hobby shows of the Young Men's Christian Association, dealing with the special interests of adolescent boys. The children's health conference, consisting of a free physical examination for children, held in Knoxville, Tenn., in September–October, 1913, in the children's building of the National Conservation Congress, established a technique for still another feature of a child-welfare exhibit. Each of these exhibits has been held at times alone and at other times as part of a larger child-welfare exhibit.

The demand for an exhibit may arise in a community in many ways. A mother's club or infant-welfare station may desire some new and graphic way of teaching mothers the methods of infant care; a settlement or club may wish to interest parents more vitally in the development of the growing boy and girl; several children's philanthropies may wish to explain their work to the public; or a group of representative citizens from all these organizations may feel

that the time has come for a graphic presentation of all the conditions that affect the well-being of the community's children, so that the whole community may know those conditions and take action concerning them.

For all these purposes the exhibit has proved a useful method of popular education. Comments of parents, teachers, and visiting nurses after the exhibit show conclusively that many homes are reached and influenced by the sections intended especially for parents. In securing community aims through publicity the exhibit has shown itself equally effective. New laws or new machinery for law enforcement or community administration have been secured by practically every large child-welfare exhibit. A comprehensive exhibit of this kind should combine both the appeal to the parent and that to the citizen, using each to reenforce the other. In this respect it offers a peculiarly democratic approach to the problems involved in the welfare of the child, since it takes as point of departure not the "poor child" nor the "bad boy," but all children, leading the parent to that interest in community action through which alone his own child may be safeguarded and the citizen to a knowledge of the individual problems of heredity, ignorance, and poverty on the adequate solution of which depends the community's future.

At first only the larger cities felt able to undertake the expense of a child-welfare exhibit, which varied from \$80,000 in New York to \$3,000 or \$4,000 in Toledo, Seattle, and Rochester, and even in a small community like Northampton, Mass., was as high as \$847. But with the improvement of exhibit technique and with the construction of many traveling exhibits owned by Federal and State authorities or by national organizations practically any community can now hold some type of child-welfare exhibit for very little cost.

SCOPE OF THE EXHIBIT.

The first thing to be decided when a demand arises for an exhibit dealing with questions of child welfare is the scope and exact purpose of the exhibit.

Is the exhibit to be part of a larger exposition? If so, it will be conditioned in the choice of its field by the classification already made by the exposition authorities. Even if no external situation compels the limiting of the field, reasons of economy, whether of time, money, or effort, may make it wiser to undertake only one part of the vast subject of child welfare and cover that part with greater detail.

Care in naming is desirable if the exhibit is to reach its proper audience. The tendency to use the title "child-welfare exhibit" for small exhibits which deal with the care of babies, home play, child-

helping agencies, or any one partial aspect of the whole question of the child's welfare leads to many misconceptions. It is far better to give these exhibits more specific names, such as infant-welfare exhibit, baby-saving show, child-helping exhibit, children's health conference and exhibit. An exhibit which covers a large variety of subjects of special interest to parents, such as infant care, food, play, interests, and ideals, but which does not include any reference to community problems, may perhaps be designated by the general name of "child-welfare exhibit," although even in this case "the child in the home" would seem a better name. If the name of a city or State is used as a prefix, as "Kansas City Child-Welfare Exhibit," the public has a right to expect a well-rounded presentation of the whole question of the welfare of the community's children, including health, education, recreation, and the many problems that arise in dealing with the defective, dependent, and delinquent child. Further description of many different types of exhibits suited to varying needs will be given later; here it will be sufficient to note the special situations which call for special kinds of exhibits.

If the main purpose is to arouse parents to a knowledge of the physical needs of their own children and the way to care for those needs, a children's health conference combined with a small exhibit on the care of the baby and the preparation of food is perhaps the most direct method of accomplishing this end. A conference requires for its fullest success the cooperation of the county medical society, the local women's organizations, and the local authorities on domestic science. If, on the other hand, the attention of parents should be directed toward the mental and social needs of the growing child, a junior exhibition or exhibit of children's interests is perhaps the most desirable type of exhibit. A playground or school or any organization which has direct access to a large number of children may manage such an exhibit, but for a many-sided display it is well to include other organizations dealing with the interests and ideals of children, such as the library, the Young Men's Christian Association, the Young Women's Christian Association, the Camp Fire Girls, the Boy Scouts, and any boys' and girls' clubs that may exist. A combination of a children's health conference and a junior exhibition might make a fairly comprehensive exhibit on "the child in the home," the purpose of which would be to stir parents to a knowledge of what they might do to encourage the well-rounded development of their children.

If, however, it is desired not only to help individual parents, but to secure needed legislation or community action for the welfare of children, then the exhibit must be more extended in scope. It may be a baby-saving show, emphasizing the need of birth registration, proper inspection of milk, a child-hygiene division in the board of health, or similar needs, and using the children's health conference

as one feature among many others. Or it may be a child-welfare exhibit, modeled on the lines of the large general exhibits held under that name and containing divisions on health, schools, recreation, moral and religious training, philanthropy, law, industrial conditions, etc., and showing the work of many organizations as well as many needs, such as a new child-labor law, more playgrounds, children's work in the library, or medical inspection in the schools.

An exhibit on a specific subject, intended to be of use to parents, can well be held by any woman's club, settlement, church, playground, school, or similar organization. On the other hand, a community child-welfare exhibit, designed to move the community to action, should include on its governing committee representatives of all agencies dealing with children—the schools, the playgrounds, the board of health, the various philanthropies, as well as members representing, perhaps unofficially, any large religious or industrial groupings whose cooperation is needed for permanent results.

USE OF TRAVELING EXHIBITS.

One of the first suggestions made when a child-welfare exhibit is planned is to save expense by collecting as many exhibits as possible from National and State sources. To meet this demand many State universities and State health departments have prepared traveling exhibits, usually available for the cost of transportation. Many national educational and philanthropic organizations have traveling exhibits, which they loan for a nominal rental.

The list of State departments—State health departments, extension departments of State universities and of State agricultural colleges—owning exhibits on January 1, 1915, will be found in Appendix 1. Progress in this field is so rapid that no local committee need hesitate to inquire of State departments which do not appear in this list.

The extent to which it is wise to make use of borrowed exhibits is a question to be considered seriously by the local executive committee. The advantages are plain. They save a heavy expense of photographs, cartoons, and lettering, and they are probably designed with more care and with access to a wider range of facts than can be secured by a local committee in the rush preceding an exhibit. But the disadvantages are equally plain. They rarely apply with great force to peculiarly local needs; they fail to arouse local effort and enthusiasm.

An exhibit designed primarily for parents may venture to borrow all its wall charts on infant care from some authoritative source. Local interest will be sufficiently excited by the examination of local children and the collection locally of the baby's clothing, bathing

and sleeping arrangements, and local exhibits on food and home play.

But in a larger child-welfare exhibit, which aims to secure community action, it is a serious mistake to send out hastily for collections of borrowed exhibits, however good these may be. The local exhibit should first be carefully planned under appropriate subjects and borrowed material used sparingly and only when it will give force and wider background to important local facts. The work of local committees, even when crude, is of such educational value that it is often worth more to the community than the technically better work of outsiders. This is not merely because it contains local facts and catchwords and describes local needs, but because the process of collecting those facts, analyzing them, stating them graphically, and coming to conclusions concerning them, may mean more for the community's future, when done by a local committee, than the portrayal of the facts in the most effective exhibit form. A committee on health, for instance, or on recreation, or on child labor comprises many factions with many views; its members possess many isolated bits of knowledge. Under the pressure of a coming exhibit factional discussion must be brought to some conclusion; the bits of knowledge, more or less vague before, must be welded into a community program, clear and definite, which the committee is willing to present to the public. If this is carefully done, then through this committee work, before a single wall exhibit is lifted or a single model in place, the child-welfare exhibit may have more than justified itself.

INFANT-WELFARE EXHIBIT.

Perhaps the simplest and most easily planned type of exhibit is the small infant-welfare exhibit held in connection with State and county fairs, baby contests, or children's health conferences. Such an exhibit may be designed merely to give information to the mothers of a community or it may have the more definite object of arousing interest in a proposed infant-welfare station or child-welfare center. It may be held by an infant-welfare committee of a woman's club, by a settlement, a visiting-nurse association, or similar organization, and may be planned to influence a small town, a country district, a city neighborhood, or an entire city.

The organization of an exhibit intended to include all the activities of a large city will be considered later under the head of community child-welfare exhibits. For smaller exhibits, held by an infant-welfare committee or association, little formal organization is necessary. Each main subdivision of the exhibit should be placed in charge of an individual or a small committee; these are named and described later. Questions of place, publicity, lectures, and bor-

rowed exhibits may or may not need attention by special committees or designated individuals; frequently in small exhibits such questions already have been determined by the circumstances which called the exhibit into being.

WALL PANELS.

The question must be decided whether the panels shall be borrowed or shall be prepared under medical direction. Living demonstrations and actual objects form by far the most effective part of any exhibit. These can be prepared locally, however, with better results than attend any traveling exhibit. Wall panels, on the other hand, while in many ways the least effective part of an exhibit, are expensive and difficult to prepare, but they form a desirable addition and one which with advantage can be loaned again and again.

If it is decided to borrow exhibit material in the form of wall exhibits, application may be made to the local State board of health, or the State university, many of which possess lending exhibits on infant welfare. (See Appendix 1.) The Children's Bureau also sends out small collections of wall panels and lantern slides on this subject, though they in no sense form a complete exhibit or a substitute for local effort. The following organizations have traveling exhibits on infant welfare: The Association for the Study and Prevention of Infant Mortality, 1211 Cathedral Street, Baltimore, Md.; the Russell Sage Foundation, 130 East Twenty-second Street, New York City; and the National Child-Welfare Exhibit Association, 30 East Forty-second Street, New York City.

In case it is decided to prepare the panels locally with the advice of the local society doing infant-welfare work or of a committee of physicians, various methods of preparation, dependent upon the amount of money to be expended, may be used. (See section on Wall Exhibits, p. 33.)

Among the many forms of locally prepared exhibits which are effective without being costly may be mentioned the following:

BABY IN THE HOME.

[Prepared by local society doing infant-welfare work or by women's organizations under medical direction.]

Clothing for baby.

Sleeping arrangements.

Bathing arrangements.

Toys—plain, unpainted.

Baby killers—long-tubed bottles, flies, etc.

Scales for weighing baby.

Good and bad carriages.

Any good ideas for the care of babies.

For this exhibit local stores would lend articles, but the choosing of these articles should be done under a responsible committee of people doing infant-welfare work. The exhibit might profitably show home-made outfits at minimum cost, as well as good ideas for families of fair income.

EXHIBIT ON FOOD.

[Under local committee of children's specialists and domestic-science teachers.]

- (a) Modification of milk—objects and demonstrations.
- (b) Demonstration of preparing various foods for young children.
- (c) Right food for babies 9 months to 18 months. (Sample meals for one day.)
- (d) Right food for children 18 months to 2 years.
- (e) Right food for children 2 to 3 years.
- (f) Good school lunches.
- (g) An exhibit of a good and a bad Saturday-night family market basket.
- (h) A good and a bad grocery, preferably prepared by the local food inspector or the housewives' league.

DIRECTORY OF ORGANIZATIONS.

Each organization dealing with babies should be allowed one panel on which to state, in briefest possible form, the precise place it occupies in the infant-welfare work of the community. This should be done under the supervision of a committee composed of representatives of all the organizations.

Every organization planning an infant-welfare exhibit should consider the possibility of holding a children's health conference in connection with it; in fact it may prove advisable to make the conference the central feature of the exhibit. The organization of such a conference is so important that it must be considered at greater length.

CHILDREN'S HEALTH CONFERENCE.

An activity frequently combined with an infant-welfare exhibit, but important enough to deserve more detailed description, is the children's health conference, consisting of a free physical examination of children under 15 years of age. A record is given each parent containing a statement of the child's condition and any general advice that seems needed regarding diet, exercise, and general hygiene. A conference of this type formed the central feature of the exhibit of the Children's Bureau at the Panama-Pacific Exposition, San Francisco, 1915. (See illustration No. 1.)

This conference is not a clinic, in that no sick children are admitted and no treatment or prescriptions given. Where there is need for treatment the case is referred to the family physician or to a clinic, or the type of specialist to be consulted is indicated on the record. The weight and height of each child is compared with the average for its age. (See Appendix 3.) Nor is it a "contest," since children are not graded or scored on a percentage basis—a method which would require the presence of several specialists—and consequently no comparing of children is possible. The kind of children that come, the needs which are found, and the type of advice given are indicated in the set of typical records found in Appendix 2.

The particular method of this conference was foreshadowed in the many local child-welfare exhibits in which local infant-welfare organizations offered a free physical examination for all babies as a part of their exhibit. It was not, however, a consciously distinct plan of baby-saving work until the National Conservation Exposition in Knoxville, Tenn., September–October, 1913, where a children's building was managed by a committee composed of representatives of the Children's Bureau, the Russell Sage Foundation, the National Child-Welfare Exhibit Association, the National Child-Labor Committee, and other National, State, and local organizations. As a contribution to the joint exhibit the Russell Sage Foundation gave the services of Miss Ellen C. Babbitt, who planned and organized the Children's Health Conference, which was later conducted by Dr. Frances Sage Bradley. It was in continuous operation for two months, and drew children not only from Knoxville but from remote country and mountain districts. It was immediately followed by similar conferences in Peoria, Atlanta, Toledo, and Dublin (Ireland), all held in connection with local child-welfare exhibits. The Dublin conference attracted wide attention and gave promise of spreading the movement to other countries in Europe had it not been for the outbreak of the war.

METHOD OF ORGANIZATION.

In some of the cities children were examined by a single out-of-town physician, paid for the entire time; in others by members of a committee of the local medical society. Both of these methods have their strong and weak points. The examination by local physicians can be conducted for less expense and helps to arouse the interest of the local medical society in infant welfare. It is not, however, adapted to conferences lasting more than a short time, and it raises several problems. Many good children's specialists have had little experience in giving simple advice helpful to mothers. The local medical society is without doubt the organization which

should take part in calling the conference and in directing its policy, deciding after careful consideration whether the examinations shall be made by its own members or shall be under the charge of a physician from another city.

The conference held in Jacksonville, November-December, 1914, in connection with the annual meeting of the American Public Health Association, deserves detailed description, since it combines some of the good points of both methods. It was organized at the request of the city board of health and the county medical society, but carried on under a physician with previous experience in conference work but with no local connections, who came three weeks before the opening to organize the work. Local physicians and dentists gave valuable assistance, as the work was too great to be handled by one person. Three school nurses were put at the disposal of the conference for the entire time.

A conference of this type requires the organization of four committees:

1. A committee of the medical society, which secures the equipment and governs the policy of the conference, decides on the place, hours, age limit, and form of record.

2. A committee of the dental society, which secures the equipment and takes charge of the examination of children's teeth.

3. A publicity committee, on which are represented the press, the business men's organizations, and the women's clubs. It is especially important that information about the conference be widely spread among mothers. This can sometimes be done partly through the schools.

4. A committee on exhibits. If the conference is part of a larger exhibit with its own committees, special committees in the conference on publicity and exhibits would be unnecessary.

In Jacksonville the exhibits connected with the conference were prepared under a committee composed of the State chairman of public health of the Federation of Women's Clubs, the president of the Jacksonville Women's Club, and the president of the Parent Teachers' Association. This committee designated the different women's organizations, which, under the direction of the physicians in charge, prepared exhibits on baby feeding, clothing, toys, and sleeping and bathing arrangements.

With enthusiastic local cooperation most of the equipment of the conference can be borrowed or made by various women's organizations. The hall can usually be obtained free and should allow ample space for the examination of several children and a place from which the public can see what is going on, preferably through a glass wall, without coming near enough to interfere. This is of special value, as one of the main objects of the conference is to educate the public

in the value of a periodic examination made by a physician, not only after the child has entered school, but also before school age. In many communities the importance of medical inspection for school children has long been recognized; but while a few infant-welfare stations now include the oversight of children between 2 and 6 years, this period is neglected in most communities. The children's health conference shows the importance of an examination for children of all ages, in order that bad tendencies may be discovered and corrected before they become serious defects. In the Jacksonville conference the salary of the organizer and the printing of the records formed almost the only expense.

EQUIPMENT NEEDED.

The equipment needed for the examination of the children is as follows:

- Desk for examining physician.
- Table for examinations.
- Table for scales.
- Scale for infants.
- Scale and measuring rod for older children.
- Tape measures.
- Pad for examining table.
- Stork sheeting for examining table.
- Supply of sheets for both tables.
- Lavatory or substitute.
- Paper towels, soap, bichloride tablets, etc.
- Electric flasher.
- Tongue depressors.
- Stethoscope.
- Calipers.
- Toys (to amuse frightened children).
- Records.
- Summary sheet for physician's own record.
- Helpful literature for distribution.

BABY WEEK.

Following the lead of New York City and Chicago, various cities during the last year have been setting aside one week, usually in the late spring or early summer, for a special celebration in honor of the baby, during which every phase of infant-welfare work is thoroughly advertised. There is no reason why smaller towns and country districts should not also have a "baby week," using any of the many features adopted in the larger cities. Among the special features which have been used on these occasions are the following:

Special stories in all the newspapers before and during baby week.

Illuminated signs, billboard posters, window cards, streamers, and other forms of poster advertising.

Lantern slides exhibited between films in all the motion-picture houses. Educational literature distributed by school children.

Leaflets on proper clothing distributed by department stores in all packages containing infant wear; leaflets on the care of baby's bottle inserted in drug-store packages; tags on pure milk wired to milk bottles by the milk dealers.

Special advertising of baby goods by many large firms.

Lectures in a central hall and in various districts.

Flag-distribution day (first introduced in the Pittsburgh baby week). A special pennant is taken to each home in which there is a baby under a year old and fastened in the window. At the same time each mother is given an envelope of literature on the care of the baby.

House-to-house canvass for funds for the infant-welfare activities of the city. This was done in the Chicago baby week. The city was districted and assigned to various women's organizations. Contributions, even of 5 cents, were welcomed, as the main object was to interest the entire city in supporting the work for babies. A daily luncheon was held to report progress.

A baby week may well include an infant-welfare exhibit and children's health conference held in some central place, or a children's health conference may be advertised by many of the publicity methods of baby week. The difference between these two plans is merely one of naming and emphasis.

PERMANENT CENTERS—STATE CIRCUITS.

In several communities infant-welfare exhibit, or health conferences, have led to the establishment of permanent centers. In Oregon a baby health contest and exhibit, held at the State fair, led to a permanent parents' educational bureau. In Iowa it is hoped that the baby health contests and conferences, for the organization of which the State university sends a physician, will lead to a series of child-welfare centers, with regular examinations of children. In New York the exhibit of the State department of health is sent out in accordance with a definite policy, and has led in many cases to local infant-welfare stations. The work of the infant-welfare station, supplemented by instructive work by nurses in the home, has proved the most successful means for the care of those babies whose parents can not afford such regular care from a private physician. The baby is brought weekly to the station to be weighed; the mother is encour-

aged in every way to nurse the baby; when this is impossible the feeding is prescribed by the physician, and the mother is taught in her own home by the nurse how to prepare the feedings. Many communities, especially small towns and rural communities, have not as yet, however, been able to support such stations, and some substitute such as one of the other forms of permanent stations must be used.

The Parents' Educational Bureau, in Portland, Oreg., is operated by the State Congress of Mothers in three rooms in the courthouse placed at their disposal by the county commissioners. Although its origin was a baby contest, the bureau has dropped not only all prize giving but even the name of contest, finding that it detracted from the effectiveness of the work. The bureau is not an infant-welfare station, as each baby is not brought back every week. It lays emphasis on the value of a complete physical and mental examination, at least once, and preferably at intervals for every baby in the community.

Usually applications are made several weeks ahead, as only 15 to 20 children can be cared for in the one session a week, which lasts from 1 till 2.30 p. m. Six doctors, a dentist, and five general workers come for this period—all as volunteers. The children range in age from 6 months to 6 years, but in communities where there is no efficient system of medical inspection to care for school children, the age might profitably be extended. The mental examination is made first, then the general physical examination, and, finally, the examination of the nose and teeth. Four doctors are engaged in the physical examinations, in order to keep pace with the time taken by the special tests. In two years 2,270 children have been examined.

The Parents' Educational Bureau also maintains a series of lectures on infant care, a supply of free literature collected from various sources, and an exhibit of an inexpensive layette, with free patterns for young mothers. A 25-cent registration fee for each baby covers all incidental charges except the salary of a clerical worker, who answers the telephone, makes appointments, and attends to other details.

Obviously, in many rural counties, the continuous time even of one worker can not at once be secured. For such counties the temporary infant-welfare exhibit and children's health conference might well leave behind "child-welfare centers" of the type planned in Iowa. These are permanent deposit stations of such literature and exhibits as may be available, at which it is planned to hold health contests or conferences from time to time. A physician to organize and direct such conferences is sent by the extension division of the State university.

A series of county child-welfare centers might well be placed on a regular circuit, supplied from a central source with a traveling medical director, assisted by the county medical society, to conduct children's health conferences at definitely fixed dates and accompanied perhaps by a nurse to give demonstrations on the care and feeding of infants. This, in many States, would seem a step not only natural but not too difficult to take and would establish a circuit for lectures and traveling exhibits and a strong working basis for later developments.

EXHIBIT ON CHILDREN'S INTERESTS.

A playground, settlement, school, Sunday school, or any organization with access to a large number of children can hold an exhibit on children's interests at small expense. Where it is desired to reach all the parents of a large community the school system usually offers the means of accomplishing this end with little trouble.

The object of an exhibit of this type, whether known as junior exhibition, child-life exhibition, back-to-the-home exhibit, or exhibit of children's interests, is to show parents the wide extent of the interests of children and the need of supplying adequate material and tools for their expression, and thus to lay a foundation for the enrichment of home life in its contributions to the development of the growing child in body, mind, character, and social relations. Supplementary exhibits from playgrounds, libraries, Camp Fire Girls, and similar organizations make a useful addition and draw the attention of parents to the use that can be made of community resources.

METHOD OF ORGANIZATION.

The organization of an exhibit of this kind may be illustrated by the junior exposition held as part of the Seattle Child-Welfare Exhibit, and accomplished with a minimum of cost.

The first step was the calling of a committee of 20, at a meeting of which the classification of exhibits was settled and a committee of three placed in charge of each department. The departments in the Seattle exhibition were as follows (see Appendix 4 for complete blank) :

Gardening.

Woodwork.

Toys.

Electrical and mechanical apparatus.

Printing.

Arts and crafts.

Domestic science.

Domestic art.

Millinery.

Pets.

The departments were further divided into age groups—those under 13 in one group and those between 13 and 16 in another. In an exhibit for parents of young children a special division might be made for children under school age.

Twenty-five thousand printed announcements of the exhibition were sent through the schools, reaching every home. The back of this announcement contained an entry form, which was to be returned by a given date. These forms were assigned as received to the committees responsible for the different departments, which then made requests for space on the basis of the applications received. The hall was then diagrammed and tables were secured and assigned to various committees. Since the space even of an armory proved insufficient to accommodate all demands, large numbers of duplicate exhibits were rejected, the choice being determined partly by order of application and partly by the desire to represent all sections of the city.

At the opening of the exhibition the children came to the hall with their exhibits and were sent to the proper department, where they met the committee in charge. The committee received each exhibit and attached to it an identifying tag, made by taking an ordinary manila tag, writing the child's name on it, and then tearing it in half. The child kept half as his check on the exhibit, and when he returned to claim his article he proved his ownership by fitting the two pieces together. (For a slightly additional cost a somewhat more convenient set of numbered tags could be secured.) Big boys from the schools acted as guards, but many of the children wished to stay through most of the day with their exhibits in order to explain them.

Tables, ropes, ribbons, manila tags, and the preliminary printed announcement containing the entry form were the only items of expense. Prizes have been found to be not only unnecessary in stimulating the willingness of the children to participate, but productive of embarrassment and disturbance. The Seattle committee even decided at the close of their exhibit that a merit badge for all participants would have been better than the blue and red ribbons with their suggestion of competition. The children should feel not that they are competing with each other, but that they are all uniting in a common display of the "work of the boys and girls of the community, showing something of their skill, perseverance, and ingenuity, and how they use their leisure time."

HOME-PLAY EXHIBIT.

An exhibit on home play, showing equipment for a back yard and for indoor play, is a valuable addition to a display of children's interests. A possible list of such equipment is given below; some of it can be made by parents, some by a manual training class in the high school (see illustration No. 2), and some can be borrowed from local Play room.

PLAY IN THE HOUSE—GOOD EQUIPMENT

Play room.
Cupboard for playthings.
Pencils.
Colored crayons.
Water-color paints.
Cardboard.
Colored paints.
Scissors.
String.
Rags.
Paste.
Molding wax or clay.
Dolls.
Shelves.
Pebbles.
Blackboard.
Pennants, flags.
A few well-chosen mechanical toys.

PLAY IN THE YARD—GOOD EQUIPMENT.

Sand box (preferably raised on legs, with benches around, to avoid dampness and dirt).
Low swing.
Playhouse.
Indian costume.
Express wagon.
Wheelbarrow.
Ladders to climb (2 ladders, 8 feet high, connected at top with 10-foot horizontal ladder).
Slide, 6 feet high, 8 feet long.
Balance beam, 10 feet long, 6 or 8 inches above ground. (See illustration No. 3.)
Garden patch.
Set of garden tools.

SUPPLEMENTARY EXHIBITS.

An exhibit of children's interests is capable of indefinite expansion, limited only by time and space, and to a less degree, by money. An organization of Boy Scouts or Camp Fire Girls would have a wealth of material to show on the interests and ideals of older boys and girls. Kindergarten material might be displayed from the standpoint of its use, not in school rooms but in the home. Where the material is expensive, ways should be shown in which the mother can follow the same idea in homemade materials. Mothers who have previously been teachers or kindergartners should be able to prepare exhibits of this type.

The local public library would probably be glad to prepare an exhibit of a child's library, showing books for different ages. A separate exhibit might also be made of educational pursuits which can be introduced to the child as hobbies. Books on insect life, simple electrical equipment, a good microscope, indicate the kind of articles to be included here. The dramatic instinct in children could be shown by a program of chosen performances made up by children. This should, however, be omitted unless groups of children are already giving such performances to their friends.

STATE-WIDE EXHIBIT.

It is quite possible to make an exhibit of children's interests on a State-wide scale through any State organization which has county or district branches. This would involve county displays at county fairs, culminating in a State exhibit, in which each county is assigned definite table space and wall space which it is asked to fill with an exhibit selected for its suggestive value to parents. Elements in determining this value would be the variety of interests shown, their use in the child's development, their applicability to children of varying ages and tastes, and the ease and economy with which the materials can be secured. Local exhibits which can not be shipped, such as playhouses, can be illustrated by photographs; but these should never form a large part of any exhibit. The first exhibit of this kind is planned for Portland, Oreg., in October, 1915, under the State Congress of Mothers.

RECREATION SURVEY.

In communities where the time, money, and workers for a recreation survey are obtainable the results can be displayed to great advantage as the central feature of an exhibit of children's interests.

In case a complete survey seems impossible or inadvisable, some of the investigations commonly used in such surveys can be carried

on by local committees of volunteers and will furnish interesting exhibit material. Among these are:

(a) A study of typical districts on a bright afternoon or Saturday to see what the children are doing, whether they are—

1. Playing in the yard.
2. Playing in the streets.
3. Loafing on the streets.
4. Playing in vacant lots.
5. Playing in playgrounds.
6. Going somewhere.

(b) A study of school children's compositions written on Monday in the sixth, seventh, and eighth grades on "What I did on Saturday and Sunday." The children should be asked to try to put down as many things as they can remember rather than an elaborate account of one event. These activities can be grouped as (1) outdoor play, (2) outdoor loafing, (3) indoor exercise, (4) indoor quiet play, calling, etc., (5) reading, (6) motion pictures, (7) housework, (8) miscellaneous. The number of children doing any of these and the number of times each activity is mentioned form separate studies. Comparisons of boys and girls are interesting. Comparisons of different sections of town often will show the influence of a playground, settlement, or large gymnasium in an interesting way.

(c) Children's compositions on "The kind of motion pictures I like best," or other suitable subject, properly classified and charted.

(d) Children's designs for an ideal yard and garden, preferably conducted through the art department of the schools. In the Toledo Child-Welfare Exhibit a group of selected children made models in sand, gravel, paper, felt, and other materials which they themselves chose to embody their ideas.

(e) A directory of organizations which deal with the interests and ideals of children, the amount of space allowed to each being determined by a committee composed of representatives of all the organizations. Any community work—playgrounds or social centers—should be especially featured.

COMMUNITY CHILD-WELFARE EXHIBITS.¹

The exhibits so far discussed have been chiefly concerned with a direct appeal to parents regarding the health and proper care or the interests and ideals of their children. They have been exhibits such as could be prepared without great expense and without outside direction in any community in which a group of interested people

¹ See bulletins published by the National Child-Welfare Exhibit Association, 30 East Forty-second Street, New York City, the Russell Sage Foundation, 130 East Twenty-second Street, New York City, and the Educational Exhibition Co., Providence, R. I., for detailed description of large exhibitions and consideration of problems raised by them.

willing to give time and work can be assembled. The preceding discussion has shown, however, that the tendency in all such exhibits is to expand to include community problems in health, recreation, and other aspects of child welfare. Unless the problems involved in such expansion and the committee organization necessary to meet them are deliberately faced, the exhibit is in danger of becoming a miscellaneous combination without proportion, touching upon some problems extensively and perhaps one-sidedly and ignoring others that are equally important for the welfare of the child.

While any organization with sufficient medical knowledge may hold an exhibit on the care of babies, and any organization with access to enough children may hold an exhibit on children's interests, a community child-welfare exhibit can not be effectively held without the cooperation of all forces in the community which deal with the welfare of the child. No community is ready for such an exhibit until there is a united conviction among the leading social workers, including those interested in health, education, and recreation as well as in philanthropy, that they have certain definite facts in their possession with which the public should be made acquainted. This does not necessarily imply a complete community survey, but does imply a knowledge of definite conditions, of laws affecting them, and of desired improvements. Without the consciousness of a message based on such knowledge and the cooperation of an effective group in the expression of it an exhibit dealing with community needs is a waste of time.

COMMITTEE ORGANIZATION.

The general committee responsible for such an exhibit should contain representatives of all prominent movements on behalf of the welfare of children and of all large religious and industrial groupings of the community which need to be considered in securing the results advocated by the exhibit. This committee will probably be too large for active work and should choose from its number a smaller subcommittee to handle administrative details.

If the exhibit is a large one, this smaller executive committee will wish to place many details, such as finance, publicity, program, in the hands of special committees. The following is a possible list of such committees, although in a very large city exhibit even these committees may find it necessary to divide their work among subcommittees, as the detail may prove too great to be covered by the groups outlined.

Finance, or ways and means.—This committee is charged with securing gifts of materials as well as of money.

Publicity (see types of publicity mentioned above under the head of "Baby week").—This committee also may have charge of all publi-

cations, such as the handbook of the exhibit and the various leaflets for distribution in the sections, or, if it seems advisable, a literature committee may be created to supervise all educational publications. Even if no funds are allowed for special literature, such a committee often can secure a well-balanced supply by offering suggestions to boards of health and other organizations which have a fund for printing. All exhibitors should submit to this committee copies of any leaflets they wish to distribute, and the approved copies should be kept at the information desk as a check against unauthorized literature. Appeals by exhibitors for money or members usually are not permitted, unless forming an unimportant part of educational pamphlets already printed.

Installation.—This committee is charged with the planning of the floor space, the decorations, the color scheme, and the general appearance of the exhibits. Its work will be outlined later in some detail under those heads. A public-spirited architect makes a good chairman for this committee. Secretaries of the carpenters' and the painters' unions have been found to be useful members, especially in strongly unionized cities, where they have often saved much time and many complications in getting the bids for construction work and materials. Persons who are in a position to secure volunteer service from artists, cartoonists, or decorators are also useful on this committee. One or two advertising men or headline writers may also be of use for consultation by exhibitors regarding effective wording, but so much work of this kind is needed that it will probably be necessary to have for this purpose a paid exhibit expert in the administrative office.

Hospitality and explainers.—This work may be done under one or two committees, as seems desirable. While each exhibitor or exhibiting committee should as far as possible furnish demonstrators or explainers, a supervising committee is needed to supply gaps in special exhibits, to furnish general guides around the exhibit, to manage the information desk, and to see that the public is welcomed and shown the objects of greatest interest. Explainers furnish the living element in an exhibit; they help to stop aimlessly wandering crowds, to focus attention on special points, and to correct mistaken impressions. In some exhibits the hospitality committee has taken charge of the check room, the water supply, the women's rest room, and has greatly assisted in the promotion of cooperation and friendliness by occasional social functions, before and immediately after the exhibit. An informal dinner held a few days before the exhibit opens, to which all committee members, explainers, donors, and people vitally interested are invited to hear five-minute presentations of the work of the committees, is a simple matter to arrange and is usually the scene of real interest and enthusiasm. An informal gath-

ering, held for three-quarters of an hour on closing night, at 10 o'clock, in the main court of the exhibit, with light refreshments and impromptu anecdotes about the week's happenings, proves a pleasant way of relieving the strain of the week's work and welding together the working groups which have been formed by the exhibit.

Program.—The work of this committee will be treated later in more detail. It includes the direct control of all lectures, motion pictures, and general entertainments, with sufficient oversight of all living demonstrations to prevent interfering programs. Its membership should usually include all persons who are directly responsible for any large special performance, such as the supervisors of music and gymnastics in the schools, the playground director, the head of the Boy Scouts, etc.

Exhibiting committees.—In addition to the committees above mentioned, charged with the control of certain aspects of the exhibit, it will be found advisable, in order to avoid duplication, contradictory statements, and lack of proportion, to group the exhibiting organizations and individuals into committees on a few main subjects, each allotted a share of floor space and charged with working out a comprehensive, well-balanced exhibit in its particular field. An exhibit of subjects is much more effective in securing popular support for community measures than an exhibit of organizations; yet when various organizations pay for exhibits their wishes must be considered. A grouping of the type suggested should be the first step in an effort to persuade contributing organizations to subordinate self-advertising to the display of community problems and resources. A simple grouping might comprise committees on these subjects:

Health.

Recreation.

Education.

Social service.

Approximately one-quarter of the floor space should be given to each subject and on each committee should be placed representatives of all the organizations entitled to be considered in planning a community program on that subject.

For a large city a more detailed grouping would be necessary, arranged in accordance with the needs of the community and the plans for the exhibit. The following lists of committees, from the Toledo and Rochester exhibits, need not be followed in detail, but will suggest subjects which should be included:

ROCHESTER EXHIBITING COMMITTEES.

Health.

Homes, including food, clothing, standard of living.

Schools, public and parochial.

Library.
Settlements and clubs.
Recreation.
The child in industry.
Churches and Sunday schools.
Law and the child.
Philanthropy.

TOLEDO EXHIBIT COMMITTEES.

Health:

Care of babies.
The child's food.
Child hygiene.
Children's health conference.
Toledo health survey.

Schools:

Public.
Parochial.

Interests and ideals:

Home occupations.
Home surroundings.
Boys' and girls' interests.
Sunday schools.
Toledo recreation survey.

The working child.

The dependent and delinquent child.

When an exhibit reaches this proportion, however, an executive office with an experienced director in charge becomes no longer an advisability but a necessity, and further details of organization must be worked out in accordance with local conditions.

FLOOR PLANS.

In any exhibit, except a very small one, the problem of the proper arrangement of space is an important one and becomes increasingly complex as the exhibit grows larger. Arrangements for women's rest rooms, baby rest rooms, toilets, dressing rooms for performers in living demonstrations, lecture rooms for stereopticon and motion pictures, administration office, and storage place for apparatus must all be considered in planning the exhibit, even if some of these conveniences are finally decided unnecessary. Aside from these arrangements a careful planning of the exhibit space itself will greatly add to the effectiveness of the whole exhibition and of every division in it. Several points should be considered in a good floor plan.

1. The observer should be able on entering to gain a fairly clear idea of the extent of the whole exhibition and its main divisions.

units are required, as the thickness of the strawboard materially increases the bulk of the package. The North Carolina State Board of Health uses a wall panel composed of three 12 by 18 inch boards of this type. Its total height, about 38 inches, is well adapted for use against school blackboards. This board also plans supplementary work in connection with the use of these exhibits, such as essays from the children on what they have learned, or on conditions in the school grounds which conform or do not conform to the sanitary conditions outlined in the exhibit.

Another cheap and durable form of traveling exhibit, used by the Iowa State University, can be made on holland cloth (window shades), held taut by light rollers at top and bottom. Each roller is split lengthwise into halves (the method used in mounting maps), and the cloth is fastened between them. The panel is hung from the wall by small rings, through which pass loops of tape the ends of which are secured between the split halves of the top roller.

The cloth furnishes a large surface for lettering, drawing, or painting, but can not be used satisfactorily for photographs, which are damaged by rolling. The photographs can be mounted separately on cardboard and numbered to correspond to spaces on the shade, to which they can be attached later by paper fasteners.

More permanent construction.—Undoubtedly the larger framed panels (size about 3 by 5 feet), made of Upson board, beaver board, or some of the many varieties of building board, surrounded by a wooden frame, are both more imposing and more durable. The exact type of wall board to be secured will depend upon local supply houses. In general, boards with a porous surface should be avoided, as they increase the cost of painting and pasting. When panels are to be shown for a long time in one place, and when they contain expensive photographs, cartoons, and lettering, the extra cost of the heavier background (about \$1 to \$1.50 per panel, including frame) is well worth incurring.

Many States and national organizations have found this type of exhibit background worth while, even for traveling exhibits, in spite of the much heavier cost of transportation. The State departments of health of New York and of Indiana have different styles in exhibits of this heavier variety, especially designed for compact packing, durability, and speed in installation and planned for setting up without attachments either to floor or wall.

The method used by the New York State traveling exhibit, in which the walls are formed by the panels set up on detachable legs, is well worth considering, even for large permanent exhibits occurring only once. It may be supplemented, perhaps, by a cheaper type of construction along the main walls of the building or in burlap booths

designed for models or living demonstrations. Some installation committees will find it cheaper and easier to construct a scaffolding with ledges on both sides about 30 inches from the ground. The panels rest on these ledges and are fastened by means of screw eyes in the upper frame of the panel attached to nails driven in the top beam of the scaffolding.

Whatever type of wall construction is used, two facts should be borne in mind: First, that ease in handling and arrangement demands that on many occasions the wall panels must be stacked upon each other, and that therefore hooks or other projections let into the back of the frames are objectionable; second, that immediately before and during the exhibit many rearrangements of panels will take place, due to discoveries regarding lighting, movements of crowds, or committee preferences, and that consequently the panels should be fastened to the scaffolding in such a way that they can be easily transferred from one position to another by unskilled laborers or committee members. The plan mentioned above, whereby the framed panels rest on a ledge and are fastened by nails driven through screw eyes inserted in the top of the frame, safeguards both these points, especially if the screw eyes are all placed in the same relative positions on the frames, so that nails once driven will be available for any panel. Unless the lower ledge is wide, it may need a raised piece on the outer edge.

COLOR SCHEME.

For the sake of harmony it is well for some central authority, probably the installation committee, with the approval of the executive committee, to fix a uniform color scheme and allow variations only for good cause. Soft grays have been more used than any other color. Soft, dull greens and blues are also good. Sometimes the lettering is done directly on this background—a method which produces a harmonious appearance, but in which it is difficult to make the slight changes demanded in most exhibits. Another plan is to do the lettering on cards or heavy paper, tacking or preferably pasting this to the background, in well-planned designs. (See illustrations 4 to 9, inclusive.) This method makes readjustments possible at the last moment before the pasting is done, and is frequently less expensive, as the lettering on cards is more easily handled. On the other hand, paper is injured by water and can not be cleaned as easily as oil paint. The exhibit of the Children's Bureau in the Panama-Pacific Exposition used a natural color (cream) Upson board, with a gray frame and with gray papers lettered in black and white.

CONTROL BY EXECUTIVE OFFICE.

The extent to which details can be controlled by the executive office will depend upon the paid force available. The central committee should at least prescribe the division of space, size of wall unit, general color scheme, and should arrange for the joint purchase of all construction materials. Large signs and signs above a certain height must be limited by the central committee, which should also send out advice regarding styles of lettering, photographs, etc. The effectiveness of the exhibit will be increased materially if all the lettering and mounting can be handled through the central office. This, however, necessitates the employment of an exhibit expert¹ to consult with the committees, make suggestions on arrangement and wording, cut down long, verbose statements, which are both ineffective and expensive, and handle all arrangements for lettering, enlarging of photographs, etc. In many large exhibits the expert has collected the material and planned the panels with little consultation of local committees. This plan usually means a clear-cut, attractive presentation of the subject matter, but sacrifices the local discussion and the working out of a statement satisfactory to all concerned, upon which the final results of an exhibit largely depend. A compromise between these two extremes demands tact and effort, but for the best results in any community both elements are needed—a careful working out, by the best forces in the community, of the exact program for which they wish public cooperation; and a clear, concise, attractive, and striking statement of that program in exhibit form under expert guidance.

SUGGESTIONS FOR EXHIBITORS.

The chief essential of a successful exhibit is variety. No matter how small the exhibit, the various ways in which facts may be presented are worth careful consideration. An exhibitor or exhibiting committee should first ask, "What, expressed in the simplest, clearest, briefest manner, is the exact message I wish to give the public?" When the answer to this question is clearly formulated the best method of presentation should be considered. How much can be shown by a living demonstration, such as a dental clinic or food preparation? What can be shown by electrical devices or models, either illustrative models, which are copies of existing objects, such as a baby's stomach, a good dairy, a school garden, or a children's

¹ On the basis of past exhibitions, at least one person should be employed in the executive office for eight weeks for every \$1,000 to \$1,500 to be expended from the central fund. Even smaller exhibits will benefit by a week's consultation with an expert. Child-welfare exhibits of sufficient size and importance to stir cities from 100,000 to 400,000 have been held at a cost of \$3,000 to \$8,000, including at least one paid expert and local office assistance. The contribution of much time and material and many exhibits is usually necessary in addition to this central fund.

institution, or diagrammatic and symbolic models used to present abstract facts in graphic form, such as pasteboard cubes to represent the different expenditures of the city departments, or the "one in seven" model, in which every seventh baby is replaced by a coffin, to show the death rate? What facts can be shown only by photographs, cartoons, charts, and statements? Each of these main types of exhibit method—wall exhibits, models, and living demonstrations—will be considered separately.

WALL EXHIBITS.

Under this head are comprised all flat exhibits, such as printed signs, charts, diagrams, and illustrations. This exhibit material is the least striking of all, and yet a small amount of it is always necessary. The best living demonstration or model needs explanatory signs, and many facts can be presented only by graphic charts or statements. Precisely because of the difficulties in making this type of material effective, special care is needed, and if possible the advice of an exhibit or advertising expert, to make the wall exhibits striking and varied.

The size of the wall unit has already been discussed. This unit should be treated by the exhibitor not as a background for a miscellaneous collection of photographs and aphorisms, but as a single illustrated statement on one subject. Wording and grouping of photographs should be carefully planned, so that the most important matters stand out most clearly and the rest of the material is properly related. Probably no part of exhibit technique is as difficult as this, but the time spent is well worth while if the exhibit is to give a true impression. Friends totally ignorant of the subject matter should be consulted in order to see what impression the exhibit will produce on the casual visitor.¹

Special care must be taken with statistical charts in order that they may be accurate, clear, interesting, and not misleading.² If maps are used, an outline map, on which a few things are filled in with color or strong shading, is much better than the usual city or State map, which is full of irrelevant detail. A common error on maps and diagrams is to use different colors to designate various degrees of the same condition, such as the infant death rate. Different shadings of the same color, or of black and white, are far less confusing wherever differences of degree but not of kind are to be shown. Colors may, however, be quite arbitrarily chosen to represent

¹ See *Twelve Good Screens and Why They Are Good*, National Child-Welfare Exhibit Association, 30 East Forty-second Street, New York City.

² This subject has been exhaustively treated in *Graphic Methods for Presenting Facts*, 572 pp. Willard C. Brinton, Engineering Magazine Co., New York City.

different kinds of things, as different trades, different causes of death, or different city departments.

Lettering.—Plain, upright letters, varying from three-fourths inch in height—or even smaller for footnotes, etc.—to 2 or 3 inches for special display, are the best. The sloping italics, favored by sign writers for reasons of speed, are especially hard to read; and, contrary to the general opinion, red letters, especially the cheap orange red used by many sign painters, which produces a glare of red and green shadows and obscures the lettering, are not effective. A color variation for important words or to lend variety, however, is desirable when used in moderation. Some gray backgrounds will take both white and black letters. Light backgrounds will take black and some other good color.

Pasted or stamped letters will prove less expensive than sign lettering if careful volunteers can be found to use them. Paper letters in different colors and sizes with gummed backs are obtainable. In using these the signs should be designed by a person with a sense of artistic balance and then pasted or stamped with great care. One designer can keep several pasters busy. If any of the workers are paid, the final cost will be little, if any, cheaper than sign lettering; but the method is useful for committees of volunteers or in towns where good sign lettering is hard to secure. Pasted letters are clearer and more effective than stamped letters, but they are more expensive and tend to peel off if used in traveling exhibits. Stamped letters will rub unless the very best grade of ink, made especially for stamping, is used. With both these forms of lettering variety in size and style of type should be introduced.

Photographs and illustrations.—One large photograph showing significant detail is worth several small ones chosen in an attempt to give an exhaustive presentation. Photographs 11 by 14 inches in size, or even larger, are desirable; smaller photographs are allowable where there is little detail. A flat finish is best, as it does not reflect light and will take paint if it is desired to color any of the photographs. Abstract ideas can frequently be presented by cartoons (see illustration No. 4), which are expensive to buy but may often be contributed.

Many attractive variations can be introduced in the use of illustrative material. The activities of a vacation school in Toledo, of which no photographs had been taken, were shown by children's paper cuttings made from memory and showing what they had done the previous summer. These were attractively mounted and used exactly as photographs would have been. In pedigree charts, used to show the results of a bad inheritance, figures cut from magazines and fashion books can be used in place of the uninteresting dots, each

figure being tinted to represent the idea conveyed and surrounded by a circle of appropriate color.

Devices which call forth the activity of the spectator are especially good. Thus a revolving wheel set in a wall panel and appropriately lettered may be used to illustrate an endless sequence, such as "Child Labor, Unskilled Labor, Low Wages, Poverty, Child Labor," or "Parenthood, Infancy, Childhood, Youth, Parenthood." The wheel may be partly hidden so that the spectator has to turn it to find out what comes next, while inscriptions above and below the wheel indicate in the first instance the viciousness of the circle and the need for breaking it at some point and in the second instance the fact that good health at any stage is a requisite for good health throughout the sequence. In the exhibit of the United States Public Health Service is a simple but clever device bearing the legend: "Turn this valve till the hand points to the name of your State; the man on the tower will then point to your State's typhoid death rate." Many community child-welfare exhibits have near the exit a placard with the question, "Who is to blame for the conditions here shown?" and the string which the spectator is directed to pull "to find out" discloses a mirror in which he views himself. Mouth hygiene exhibits sometimes use a small mirror set in a widely smiling mouth, with directions to "look at your teeth."

Silhouettes add variety to wall exhibits and were used with good effect in the New York City building in the Panama-Pacific Exposition. Diagrams and figures were painted on cardboard or thin three-ply wood, then cut out and placed in position on the wall panel. A very effective silhouette was used by the fire department to illustrate the different heights to which water is sent by varying pressures. The tall skyscraper, the fire engine, and three different jets of water were all cut from a three-ply wood surface and raised 3 inches from a background which showed the distant clouds. In the 3-inch space thus formed was inserted a thin, red electric-light bulb, which flashed and faded, sending a fiery glow over the clouds and around the edges of the building. Simpler silhouettes may be made of paper in different colors. A photograph can often be made more effective by cutting out all the background and letting the central figures stand in relief as in a silhouette.

Transparencies.—Transparencies may be used either separately or as part of a wall design into which they are fitted; but good transparencies are often spoiled by poor lighting. The most effective lighting in the Panama-Pacific Exposition was that of the United States Forest Service, which utilized the space in front of large windows, framing the transparencies in a continuous black screen which shut out all light for a height of 10 feet except that coming through the transparencies. Where natural lighting can not be ob-

tained the transparencies should be placed on a dimly lighted wall, as the strongest electric light will not compete with direct daylight. If this rule is followed excessively strong lights, which tend to make a glare in spots, will not be needed; a box with a white painted inner surface on which a light is indirectly thrown will be sufficient. Transparencies can be effectively used in unexpected places, set into a large tree stump or an imitation bale of cotton. A peculiarly beautiful effect can be obtained with landscapes by placing lights of different colors behind them, one flashing on as the other fades. The spectator spends some time deciding whether there is a real change of scene.

THREE-DIMENSION EXHIBITS.

Under this head come all exhibits which occupy floor space or table space, including collections of materials and objects, models of various kinds, and electrical devices. Most of the exhibits mentioned under the head of infant-welfare exhibits and exhibits on children's interests are collections of materials, such as baby clothes, foodstuffs, and toys made by children. These are effective exhibits, usually calling forth much local interest and cooperation, and most of the materials can be borrowed for short-time local exhibits. Other exhibits of this type are:

The homes of Mrs. Do Care and Mrs. Don't Care. This shows both a good and bad kitchen and bedroom. The material for the good rooms is borrowed from the stores or the homes of the committee; that for the bad rooms from the local relief societies or the attics of committee members.

A hospital room for a child showing all equipment. Used to present the need for more hospital accommodations.

Equipment for a dental clinic. This may or may not be used as the background for a living exhibit consisting of a free dental examination for children.

A child's library, perhaps shown as part of a small children's room in the public library, with an attendant who allows children to read the books.

Models.—Scale models, or models which are reproductions made to scale of existing or proposed structures, are very expensive and usually unnecessary in a child-welfare exhibit. Illustrative models in which exact dimensions are not followed, but an effort is made to make a graphic presentation of an idea, may often be constructed by manual training classes or kindergartens. The old Moravian "putz," which still survives in the Christmas celebrations of some families, is a model of this type and can be made by any clever boy. It will be useful for Sunday-school exhibits, and a detailed description of its primitive but effective construction may furnish sugges-

tions for other models. A large rough table (4 by 6 feet) set in a corner is used as the foundation on which, by the use of excelsior, covered with moss and fir branches, a representation of a hilly landscape is constructed. Footpaths and a distant desert, across which the wise men are seen coming, are made of sand and gravel. A lake is made with a large tin pan lined with stones and overhung with moss to conceal the edges. Figures are found by diligent search through toyshops and 5 and 10 cent stores. A cave-like stable is made of a packing box about a foot square, with a large entrance cut at one end, through which the figures in the stable are visible; the lines of the box are covered with moss and hidden by trees. Among the highest fir boughs is half concealed a star, cut from tissue paper and set in cardboard, covering an electric bulb which can be turned on from a near-by switch. A model of this type is necessarily frail and must be constructed in position, but it will last for a week's exhibit. Much more durable models have been made by school classes by the use of various materials, such as wood, cement, clay, plasticine, or pasteboard. A good flooring for a model which is to show an open yard is made of rough boards set several inches apart and covered with a fine-meshed wire netting, over which is poured thin cement. The wire provides an elastic foundation which keeps the cement from cracking. The cement may represent paths or grounds around whatever building is to be shown. Grass is made by dyed sawdust dropped on with glue or by roughened felt glued to the cement. The building on such a foundation may be made of thin wood or of cardboard with windows and doors painted in. Smaller models may be made of clay built up on a wooden board. Streams and rivers are then painted directly on the board.

Among the models which have been prepared for child-welfare exhibits by volunteer work are:

A good and a bad dairy. This model was made chiefly of wood and cement, with cows from a toyshop and milk pails manufactured out of old tin cans. (See illustration No. 10.) Obviously not all the features of a dairy could be reproduced, but the main idea of care and cleanliness versus dirt and carelessness was effectively carried out. Rotted fence boards were eagerly hunted by the boys for use in the bad barn, and the ingenuity displayed in collecting materials showed a vivid interest on the part of all the class.

Model showing the spread of typhoid, made by the Pasadena High School girls' class in sanitation. This was a landscape made of clay on a wooden floor, with streams painted blue, and tiny houses bought at a toy store. An inscription showed that the typhoid started at house A near a stream; that the discharges from the patient were thrown into the stream; and that in a little village shown farther down the stream half the houses had typhoid. These

were the houses that drew water from the stream. The remaining houses, situated between house A and the rest of the village, did not contain any cases of typhoid, although they were nearer the source of infection. They drew their water from an uninfected well (shown in the foreground) by a test tube which pierced the floor of the model and was seen against painted strata of sand below.

Model showing school playgrounds. This was a contrast model showing how the grounds around one school allowed plenty of space per child, while the grounds around another school were so small that all the children could not find standing room. The grounds were made of cement, sand, and sawdust, as described above; the buildings and railings of wood, while the children were represented by penny dolls. These dolls fixed the scale on which the entire model was constructed, so that their positions in the school yard gave an accurate picture of the open or crowded condition of the grounds.

Beans of different colors are often used to represent percentages. For instance, the number of deaths among every 100 babies during the first year has been shown by black beans mixed in a jar of white ones. This is in some ways a dangerous device, as an incomplete mixing may give a wrong impression which should always be guarded against by an explanatory sign giving the exact figures. In addition to this safeguard, it may prove better to arrange the beans in a very thin bottle, or in a shallow dish, where they can all be seen at once. In the Seattle child-welfare exhibit, beans of different colors in a large shallow box were effectively used to show the numbers of people of different nationalities in the city. A placard above the box gave the exact numbers, but could not have given as graphic a presentation of the mixed character of the city's population as was given by the bean table. A similar use may be made of other objects than beans to illustrate figures which would otherwise have to be shown by a wall chart. Thus, the amounts per capita spent by different cities for health, or recreation, or education, can be shown by little heaps of coin, inside a glass case; this seldom fails to arouse interest.

A clever combination of photograph and model, which attracted attention because of its unusualness, was shown in the New York City building at the Panama-Pacific Exposition. An upright board about 2 feet high ran along the rear of the table, and on it was mounted a large photograph showing the sky line of New York, beginning at the water's edge. On the surface of the table was pasted a photograph giving a much foreshortened view of a surface of water; this appeared to be continuous with the rear picture, and represented the Hudson River. A model of a municipal recreation pier, made of painted wood, was placed directly on the table.

The contrast between two styles of presentation, usually kept separate, that of the photographer and that of the model maker, made the exhibit effective and attracted notice. A similar combination of the method of the model and that of the chart can be made by placing a map flat on a table and using colored upright poles in place of the bar diagrams which would be used on a wall. In many cases the effect thus produced is truer to actual conditions, as when graduated poles, placed in a map of New York City, are used to illustrate heights of buildings in different sections of town. Varying death rates in different parts of town can also be studied better in a model of this kind than in a diagram, as the relative position of various areas can be discerned at a glance.

Moving models and electrical devices.—There are many moving models and electrical devices which, while expensive for the small-town exhibit, are well worth the consideration of any organization planning a traveling exhibit. One of these is the automatic stereopticon, of which there are several types, all operating in daylight.

Typical models are:

The Fly's Air Line, used by boards of health and showing a swarm of flies traveling from stable manure to an open privy and then to the family table.

Part-time Schools, a model owned by the Massachusetts State Department of Education, showing two sets of children changing places in a school and a factory as a band of light passes from week to week of a calendar.

The Path of Life, owned by the New York State Department of Health, showing a series of moving belts upon which dolls, representing people of different ages, move from birth to death according to the ratio shown by mortality tables.

The waste of preventable disease, shown by a model owned by the Public Health Service, in which a long ribbon covered with coins passes continuously out of the pocket of a tall Uncle Sam into the mouth of a crocodile appropriately labeled.

Models of this kind should be prepared by experienced model makers; those made by amateurs are usually unsatisfactory. There are, however, a few simple electrical devices, by the use of which local electricians, and in some cases local committee members, can add effectiveness to an exhibit. Frequently a theatrical electrician can be secured who is especially skilled in work of this type.

The skedoodle plug is an inexpensive attachment (about 50 cents, ordered through any electrical supply house) which can be attached to an electric-light socket and adjusted so that the light will go on and off at fairly regular intervals. The uses of this plug are many. It may be timed for a 10-second interval, and hidden behind a glass or tissue paper star bearing the inscription: "Every time this star

fades, somewhere in Europe or the United States a baby under 1 year dies; 1 every 10 seconds, 6 every minute, 360 every hour. Half of these deaths are preventable." The figures in the inscription are quite necessary to correct the occasional moments when the star will be out of order. A skedoodle plug may also be used instead of a stationary light behind a transparency. It may be used behind a combination of ground glass and paper arranged in such a way that part of an inscription will be visible at all times and part only when the light comes on. Questions and answers, maps across the face of which some comment is written concerning laws or conditions, are types of this use. Careful testing is necessary to secure materials which will be opaque to light and yet will not show through the ground glass when the light is off. White letters of heavy opaque paper pasted upon a background of translucent white paper may be used. A skeedoodle plug may also be used inside an opaque "soothing-sirup" bottle, bearing on a thin, translucent label the inscription: "Dr. Killem's Soothing Sirup Quiets Babies." When the light inside the bottle comes on it makes visible the word "Poison!" cut from black opaque paper. To get the best results the first inscription should be painted in light transparent colors, so that it fades out completely.

Flashers are devices by which one circuit of electric lights can be exchanged for another. The larger type with a sequence of several circuits is operated by motor and is rather expensive, but a single alternation of lights can be made by simple flashers (about \$1 at an electrical supply house) operated by heat contact. Many uses can be made of a flasher of this kind in illuminating first one inscription, then another. The most effective use is perhaps the well-known "illusion" in which one picture or model is mysteriously replaced by another. This can be used to change a bad room into a good one, or to show a dirty beggar at a drinking fountain followed by a mother and child. In a library exhibit an illusion was used to illustrate the statement, "The child sees—right through the pages of the book—the world of which he reads." In this case the book page faded out and disclosed a scene or a globe. Illustration No. 15 shows the construction of an "illusion."

Simple motors with appropriate gears attached can be used to run revolving or oscillating signs and turntables bearing models. A moving panorama made for the exhibit of the Children's Bureau at the Panama-Pacific Exposition was entitled "Our Thirty Million Children," and consisted of a chart showing for successive ages the proportion of children dying, going to school, or at work. A narrow, continuous ribbon bearing a motto sometimes is made to run around the top of a booth. A motor may be made to operate a turntable, not

continuously but by definitely timed movements, so that an inscription or a picture appears for a given length of time and then passes quickly out of sight, to be succeeded by another. This is done by causing a wheel to revolve on which a projection strikes another projection on the revolving sign. The effect is particularly good if the turntable bearing the four or five sided frame containing signs or pictures is hidden in a case of which only one side is open, so that only one sign can be seen at a time. In all experimenting with motors the very best electrical skill is needed; it is not cheap work, except for organizations which have an electrician at their command.

Two or three other specific uses of electrical devices may be mentioned.

"A Day in Baby's Life" may be illustrated by a large clock (first used at the Pittsburgh Baby Week) around which the hands travel rapidly. As they pass different hours they form contacts which illuminate different inscriptions or pictures illustrating the activities of the baby at prescribed hours, such as nursing at regular intervals, being dressed and bathed, and sleeping.

"What to Do" is the title of a large electric wall chart used in the philanthropy section of several child-welfare exhibits. The spectator is instructed to "press the button to find out" where to go "if you want to adopt a baby," "if you know a case of cruelty to children," "if a poor family applies to you for aid," etc. Opposite each question is a push button which is connected with an electric light behind a transparency, on which is inscribed the name of the organization to be consulted.

Magic mirrors, often used for commercial advertising, can be adapted for use in educational exhibits. A clear-cut picture, design, or inscription, made on translucent or transparent material such as paper, celluloid, or ground glass, is placed directly behind a "double mirror" made of two pieces of glass with thin "silvering" between them. The mirror, with the inscription behind it, is then fastened into the front of a shallow box containing lights. When the light is off the darkness of the box, reenforcing the thin silvering, makes a good mirror; as soon as the light is turned on, the hidden inscription or design appears upon the mirror's face. This device can be used with a skedoodle plug if only a single design is to be shown. More complicated mirrors show different signs, one after the other, on different portions of their face and involve the use of a flasher and opaque partitions between the various lights.

Occasionally exhibits occur in which a moving model can be effectively and simply made without the use of electricity or any complicated mechanism. A good example of this is a model used by the United States Forest Service to illustrate the value of forests

in preventing erosion of soil. At the two rear corners of a model about 6 feet square light showers of water fall from faucets. On one side the water is received by a fir forest; it trickles through the branches and emerges as a clear stream flowing through a clear lake into a drainpipe at the front of the model. On the other side the water strikes a bare hillside and is speedily converted into a muddy stream which wears away the hill, converts a lake into an overflowing marsh, and spoils the surrounding landscape. On both sides of the model the water actually completes these operations without interference, and thus gives an effective object lesson.

LIVING EXHIBITS.

A short investigating tour taken on five separate occasions through four of the exhibit palaces of the Panama-Pacific Exposition showed that of 25 exhibits attracting the attention of more than 10 persons all but one depended for their interest upon the constant activity of human beings. A flour exhibit, in which women dressed in national costumes made the breads of various nations; a cigar exhibit, in which girls manufactured cigars; exhibits in which girls gave away food samples; a telephone exhibit, with a man talking to New York; a five-scene illusion, showing the progress of typewriting; a woman who revolved, apparently in mid-air, with her feet executing dance steps above her head; these were the features on which the successful commercial exhibitors relied to draw crowds. Among the educational exhibits the Children's Bureau grouped its exhibits around a children's health conference, with an examination of children, and also carried on demonstrations of home play and the preparation of food; the Bureau of Mines conducted a mimic mine explosion daily, and administered first aid; the Race-Betterment Exhibit supplied free vibrating chairs, in which the tired public, comfortably reclining, unconsciously became volunteer demonstrators.

Other things being equal, the interest taken by any city in a child-welfare exhibit is probably in direct ratio to the number of volunteer attendants and performers. The human element in an exhibit may be of three kinds:

Explainers and guides.

Expert demonstrators and lecturers.

Performers in entertainments and living exhibits.

Explainers.—The organization of explainer has been mentioned under the head of committee organization. That an exhibit "explains itself" to the exhibitor is no reason for dispensing with explainer. As hostesses and demonstrators they draw the public into the exhibit and help to drive home important points. A spectator remembers the things which he discusses. Realization of this fact led, in the Springfield exhibit, to the reserving of a space near the

~~exit, where discussion~~ concerning both the exhibit as a whole and any questions raised by it was constantly carried on under expert guidance.

These explainers are in some ways more important than the exhibits themselves; a poor exhibit with a good explainer will draw more attention and make a more lasting impression than a good exhibit with a poor explainer. But vivacity and an ability to talk are not the only qualifications necessary. Much harm can be done by inaccurate explaining, and this should be carefully guarded against.

In order to insure competent explainers, each exhibiting committee should as far as possible provide its own, and when this is impossible should apply to the committee on explainers for volunteers, for whose training the exhibiting committee then becomes responsible. Weekly meetings of explainers to receive instruction have sometimes been held to meet this situation. In addition to these trained explainers, there is always room for general guides and hostesses in attendance at the information desk and free to be assigned wherever needed. All explainers and demonstrators of every kind should report to the information desk on entering the building, so that they may be easily reached and so that the chairman of explainers may be sure that the entire floor is well provided with them.

Demonstrations.—These range from the simple demonstration, which is hardly more than an explanation of the exhibit, to changing programs held on special stages distributed throughout the exhibit. They are directly under the control of the several exhibiting committees, which should keep in close touch with the program committee to avoid conflict with programs near by. Some demonstrations are practically continuous; others are reserved for special hours or special days. The committee on health, for instance, may wish to have a nurse giving a continuous demonstration (on a doll) of the bathing and dressing of the baby. Demonstrations on the proper preparation of food for young children are more apt to be a part of a set program, varying from hour to hour and day to day as different foods are shown. A dental examination room, an infant-welfare station, or a complete children's health conference may be living exhibits in the health section. (See illustration No. 11.) In the Rochester Child-Welfare Exhibit a small booth was set aside for the inauguration of the spring fly campaign, for which children enlisted and received souvenir pledge cards and medals; the crowd attracted here was very large. (See illustration No. 12.)

A committee on schools frequently finds it advisable to carry on small demonstration classes to illustrate some of the subjects taught in the schools, such as manual training, domestic science, drawing, or paper cutting. A recreation committee often centers its display

around a small playground, which cares for the children who wish to come. The library may offer a similar attraction to children by maintaining a small children's room in actual operation. (See illustration No. 13.) The philanthropy committee (or the health committee) may manage a small day nursery for the benefit of mothers who wish to see the exhibit. In all these cases the children themselves, merely by availing themselves of opportunities offered, make a living demonstration to the public of the worth of these opportunities.

In some parts of the exhibition, notably those devoted to settlements, clubs, and associations, it may seem wise to erect a special stage or set aside a special floor space for the joint use of several organizations, no one of which can furnish enough material to fill it. Boy Scouts showing their "first aid to the injured," Camp Fire Girls' activities, classes in weaving or pottery from a settlement, demonstrations of folk dancing not suited to a larger space, a class in butter making from an industrial school, or a class in speaking from an institution for the deaf are all among the possibilities in a space of this kind.

Under this head of living demonstrations would come also special conferences for mothers, held under the health committee and conducted by local doctors, and specially conducted tours through various sections, for which some well known local person is announced as guide. These demonstrations can well be carried on under the exhibiting committees, but if they promise to attain much size and importance the program committee should be consulted about them.

Program committee.—Before selecting a program committee the executive committee should first of all decide on the general type of program desired. Large conferences with out-of-town speakers have almost invariably proved disappointing when held in connection with an exhibit, unless the exhibit is a very small one, chosen simply to illustrate the conference. Custom probably demands an exception to this rule in the case of a formal opening, where the speeches should be short, pointed, and interspersed with music or other forms of entertainment. One or two small conferences or round tables of workers may be valuable if the audience is chosen as carefully as the speaker and the subjects restricted to matters of immediate importance on which action is pressing. But most of the social workers of the community should be engaged at this time in explaining the exhibit or planning the follow-up work to come after the exhibit. Any conference which diverts them from these duties is likely to do harm. If sufficient money is available for good speakers, it is a much better plan to bring them at intervals after the exhibit is over, when each address can be separately advertised and when the exhibit

material reenforcing the address can be assembled again and set around the lecture hall. Such addresses, as well as the round tables above mentioned, may be referred to the program committee, or it may be decided that they can be handled better through the committees interested in the subjects to be represented.

After disposing of the question of conferences and referring the minor demonstrations in the sections to the various exhibiting committees the main question remaining concerns the kind of program of entertainments to be planned for the central court or main stage of the exhibit. Opinions are divided concerning the value of large, general entertainments occurring twice daily and drawing great crowds of people only partially or not at all interested in the subject matter of the exhibit. As a rule, however, demonstrations on a big scale of activities of the community's children, such as choruses of 1,000 voices from the schools, folk dancing, and gymnastics from the schools and playgrounds, and similar displays, have a very important function. They serve as exhibits of community activities; they give large numbers of children and their parents a feeling that they have a share in the exhibit; and they draw out not merely a crowd, but a thoroughly democratic crowd, a crowd coming to see its children perform, not yet interested perhaps in all the matters displayed in the exhibit, but the crowd, none the less, upon which the securing and enforcing of all remedial legislation will depend. If the large performances in the central court or on the main stage are restricted to three-quarters of an hour in length, and if the explaining force is well organized and ready to handle the crowds that are released immediately after the entertainments, no harm but rather good would result from a type of demonstration which brings out thousands of people. To safeguard the children taking part the entertainments should be in the nature of an exhibit of work actually carried on in schools, playgrounds, or under volunteer agencies, with a minimum of rehearsal and consequently with the possibility of using different children for almost every performance. This arrangement is also advisable in order to draw parents from as many parts of the city as possible.

If a program of this type is agreed upon by the executive committee, then the program committee should be made up of the persons who are fitted to take charge of separate programs, such as the supervisors of music and gymnastics in the schools, the physical director of the Young Men's Christian Association, leaders of the Boy Scouts and Camp Fire Girls, etc., under the chairmanship of some person mutually acceptable. This committee need meet only twice—once to assign the times of the performances and decide upon the equipment which is needed jointly, such as piano and dressing rooms, and later to determine details of floor management. The installation committee

must be consulted on many of these matters, and careful consideration must be given to questions of special equipment, such as chairs needed for some performances but not for others. The frequent movement of large numbers of chairs, for instance, may prove a serious item of expense and should be carefully guarded against.

Special pageants and dramas written for performance by children at child-welfare exhibits are frequently well worth giving. A pageant on a large scale, lasting for an entire evening, is perhaps on the whole inadvisable, as it interferes seriously with the conduct of the rest of the exhibit and can not be given with the best effect under exhibition conditions. Two short plays, prepared on subjects concerned with the welfare of children, were used to great advantage in the Pittsburgh Baby Week. One of these, entitled "The Theft of Thistledown," will serve as an example. It depicts a fairy court, to which, amid dances and fairy revels, Thistledown brings an earth baby stolen from conditions which she graphically describes. In punishment for her theft she is condemned, greatly to her dismay, to become herself that much loved and much abused thing, an earth baby, until such time as mothers learn to treat their babies properly. The play closes with a picturesque appeal to the audience to help free poor Thistledown.

AFTER THE EXHIBIT.

Some possible results to which exhibits may lead have been mentioned in connection with the infant-welfare exhibits and health conferences designed to encourage the establishment of infant-welfare stations or child-welfare centers. The results of a community child-welfare exhibit are more varied, depending upon the particular needs emphasized by the exhibit and the particular organizations that were especially active in working for results. An exhibit is a form of education through publicity. If considered an end in itself, the closing night will indeed be "the end"; if used as a tool, it may be made the means of real accomplishment. A new factory inspector in Kansas City, a housing inspector in Louisville, a \$25,000 school building in a congested district of Northampton, increased sewer connections in Easthampton where the ice supply of the town was menaced are types of results which have been secured in practically every community that has devoted sufficient time and thought to the planning of a child-welfare exhibit. In cities where no organized combination of social agencies exists to interpret and carry out the legislative program suggested by an exhibit, the exhibit organization itself is often a first step to such a combination and leaves behind it committees which are natural working divisions of the social forces of the community, together with lists of many new work-

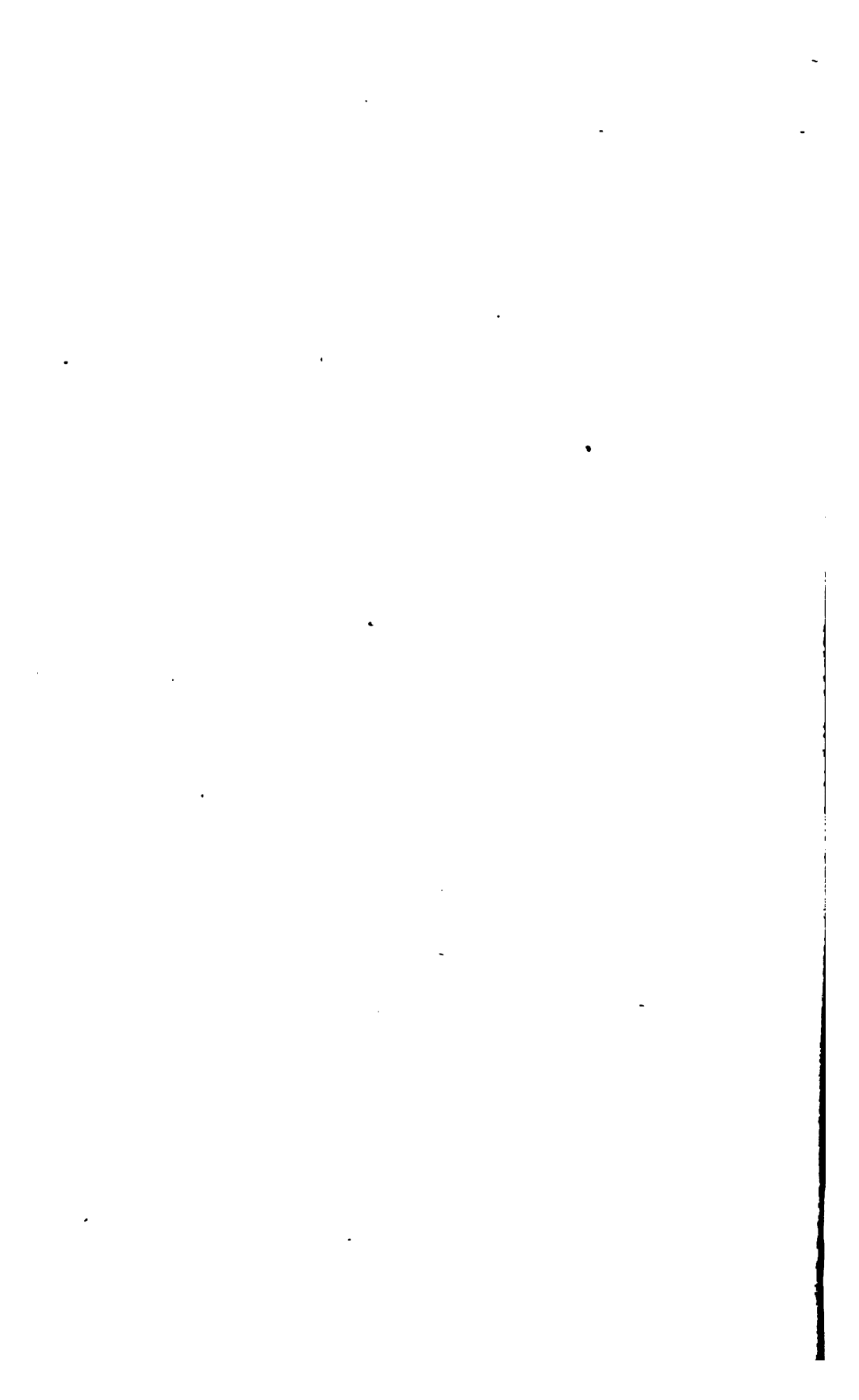
ers discovered by the committee on explainers. Where no distinct need exists for a new grouping of the city's forces the child-welfare exhibit should practically disband after the exhibit instead of adding to the numerous agencies already existing and should turn its work and its possessions over to the agency best qualified to carry on the work not yet finished.

Local exhibits prepared for a large exhibition may be used again and again in neighborhood exhibits. They may be deposited in the public library, if it is a strong and conveniently situated institution, and drawn out by application; while the demand for their use can be stimulated by a committee of volunteers drawn from the original child-welfare exhibit or from the organization now in charge of its affairs. Even if exhibits are taken back by the organization which prepared them they should be catalogued at some central place.

The immediate conscious purpose of the child-welfare exhibit is, after all, not to legislate, nor to combine, nor to convert, but to exhibit, and by exhibiting to educate. It is the answer to a great popular demand for easier and quicker ways of learning.

"We do this for the baby since we went to the coliseum," was a constantly repeated phrase in the round of nurses' visits after the Chicago Child-Welfare Exhibit. "Since the exhibit social workers know each other by their first names," said a Kentucky woman. "Since the exhibit people understand what our board is trying to accomplish," said a prominent city official. "After the exhibit the support given to our society was doubled almost immediately," said a New England worker. "Since the exhibit social work has a new standing in the community," said a prominent citizen of a western city.

Through these subtle changes of attitude and conviction, of individual and community relations, the child-welfare exhibit works out its true purpose of popular education.



APPENDIX 1.

CHILD-WELFARE EXHIBITS OWNED BY STATE DEPARTMENTS, JANUARY 1, 1915.

California, State Board of Health, Sacramento.	General health car.
Colorado, State Board of Health, Denver.	Lantern slides.
Florida, State Board of Health, Jacksonville.	Two general health exhibits, including 60 square feet of wall displays referring to children. Motion pictures and lantern slides on general sanitation. Literature and lectures supplied.
Georgia, State Board of Health, Atlanta.	General health exhibit and illustrated lectures.
Illinois, State Board of Health, Springfield.	Extensive general health exhibit of mechanical and still models, electrical devices, and hand-colored cartoons, requiring three booths 10 by 10 by 8 feet for the part relating especially to children. Many models on infant mortality, flies, sanitation, etc. Motion pictures on need of birth registration, etc. Slides, literature, and lecturers sent.
Indiana, Purdue University, Lafayette.	Models of infant clothing and pictures dealing with infant feeding used in lectures on the hygiene of infancy before women's clubs, mothers' club meetings, farmers' institutes, etc.
Indiana, State Board of Health, Indianapolis.	Extensive general health exhibit of 600 square feet wall space, about one-fifth of which is devoted to child hygiene. Models on sanitation. Six motion-picture films, 800 slides. Literature and lecturers furnished.
Indiana University, Bloomington.	Traveling exhibit of eight screens suggesting what any community can do for itself and for its children.
Iowa, State Department of Health and Medical Examiners, Des Moines.	Extensive general health exhibit, including 100 square feet of wall space for exhibits relating to children. Models on patent medicines, baby saving, sanitation, etc.
Iowa, State University, Iowa City.	One hundred wall charts, 3 by 5 feet each. A physician supplied for organizing and conducting baby health contests and conferences.
Kansas, State Board of Health, Topeka.	General health exhibit, including 500 square feet of wall charts on care of babies. Motion pictures and slides. Literature and lecturers.

Kansas, State University, Lawrence.	Exhibits showing surveys of Lawrence and Bellville, 200 square feet of wall space. Seven motion-picture films, 2,000 slides. Literature and lecturers. General health travelling exhibit.
Kentucky, State Board of Health, Frankfort.	
Louisiana, State Board of Health, New Orleans.	Education hygiene exhibit cars and small parish-fair exhibit. One-third to one-fourth on children. Eleven electrical devices, 20 models. Fourteen motion-picture films, 500 slides. Literature and four lecturers continuously (one for negroes).
Maine, State Board of Health, Augusta.	Exhibits on child welfare, school hygiene, rural hygiene, tuberculosis (about 600 square feet wall space). Framed cards and cards on burlap strips. Table exhibits, slides. Large variety of literature, lecturers. General health exhibit, including charts and models on child hygiene and sanitation. Slides and lecturers.
Michigan, State Board of Health, Lansing.	General health exhibit and motion-picture machine. Lecturer.
New Jersey, State Board of Health, Trenton.	Three exhibits on rural sanitation and three on child welfare. Each child-welfare exhibit requires 70 linear feet of wall space and 15 by 21 foot booth for infant-welfare station. Models, motion pictures, slides. Pamphlets and lecturers. Exhibit manager, nurse, and mechanic with each exhibit.
New York, State Department of Health, Albany.	Exhibit on general health, including child hygiene. Models. Slides and lecturers. Parcel-post exhibits for small communities. Public-health exhibit on infant mortality, blindness, school hygiene, dental hygiene, communicable diseases, occupational diseases, tuberculosis. Requires room 30 by 80 by 14 feet. Models and electrical devices. Ten films, 1,500 slides. Leaflets and lecturer.
North Carolina, State Board of Health, Raleigh.	Exhibit on infant welfare, 1,200 square feet of wall space. Special help for communities preparing their own exhibits, blue prints, etc. ¹
Ohio, State Board of Health, Columbus.	Extension work includes formation of homekeepers' clubs for girls and of mother circles for the study of the child. Baby contests and conferences arranged. Demonstrations of sleeping quarters for 1 child. Equipment for milk modification. Feeding charts. Literature distributed.
Pennsylvania, State Department of Health, Harrisburg.	Charts, motion pictures, literature, and lectures on typhoid, tuberculosis, hookworm.
South Carolina, Winthrop Normal and Industrial College, Rock-hill.	Car on general health and infant hygiene.
Tennessee, State Board of Health, Lebanon.	
Texas, State Board of Health, Austin.	

¹ This department has a large exhibit in the Panama-Pacific Exposition, which should be available after Jan. 1, 1916.

- Texas, State University, Austin. Forty panels on better babies, 10 on child labor.
Models and electrical devices.
Motion-picture machine, 500 slides.
Thirty bulletins.
- Utah, State Board of Health, Salt Lake City. Slides, literature, and lectures.
- Vermont, State Board of Health, Burlington. Motion pictures on milk, water, vital statistics, tuberculosis. Slides and lectures.
A motion-picture machine with electrical motor generator for use in rural districts where electricity is not available.
- Virginia, State Board of Health, Richmond. Charts on tuberculosis, hookworm, typhoid, 300 square feet wall space. About one-half refers to children.
Kinetoscope, with films on fly, mosquito, care of baby, etc. 250 slides.
Literature and lecturers.
- Washington, State Board of Health, Seattle. A few wall charts and pamphlets on the care of the baby.
- Wisconsin, State University, Madison. One hundred and twenty-five charts on health. Section devoted to children requires 75 square feet wall space.
Models and electrical devices.
Five films and 1,000 slides.
Literature and lecturers.

APPENDIX 2.

RECORDS OF CHILDREN'S HEALTH CONFERENCE.

The record blank used by the Children's Health Conference conducted by the Children's Bureau in the Panama-Pacific Exposition is not a score card, with grades on a percentage basis, but a much simpler statement, being intended not to grade children for purposes of comparison but to be of service to the individual child. Measurements are placed where indicated; a check is placed to indicate a defect, opposite skin, bones, nutrition, or any of the items in this column. The summary is used for suggestions to the parent for the improvement of the child.

The record below is checked to indicate a typical case of adenoids:

.....	1. Male; Female	×	12. General nutrition: <i>Poor.</i>	.....
.....	2. Age: <i>6 years.</i>			.....
.....	3. Weight at birth: <i>8½ pounds.</i>	×	13. Fat: <i>Deficient.</i>	.....
.....	4. How long breast-fed exclusively: <i>6 weeks.</i>	×	14. Bones: <i>Not well formed.</i>	.....
.....	5. Age when weaned: <i>3 months.</i>		15. Muscles: <i>Soft.</i>	.....
.....	6. Why weaned: <i>No milk.</i>		16. Skin.....	.....
.....	7. What foods:		17. Hair.....	.....
.....	<i>Mod. cows' milk.</i>		18. Eyes .....	.....
.....	8. Previous illnesses (with age):	×	19. Ears .....	.....
×	Whooping cough.....		20. Nose: <i>Poorly developed.</i>	.....
×	Measles.....		21. Mouth.....	.....
.....	Respiratory diseases.....		22. Teeth.....	.....
.....	.....	×	23. Tonsils.....	.....
.....	Digestive diseases.....		24. Adenoids: <i>Present.</i>	.....
.....	.....		25. Glands.....	.....
.....	Other diseases.....		26. Heart.....	.....
.....	9. Weight: <i>39 pounds 10 ounces</i>		27. Lungs.....	.....
.....	10. Height: <i>46.5.</i>		28. Liver.....	.....
.....	11. Dimensions of head: <i>20.6.</i>		29. Spleen.....	.....
.....	Chest: <i>21.1.</i> Abdomen: <i>21</i>		30. Ext. genitals .....	.....

The second sheet of the record is left blank for a summary which forms a written résumé of the more detailed advice given by word of mouth. The following selected summaries will give a suggestion of the type of children coming to the conference, and the simple language in which advice is given.

All technical terms are avoided in order to bring the suggestions within range of the understanding of a mother of average intelligence.

1. (Summary of above record.) This child has thin, pinched nostrils and contracted chest, due, probably, to presence of adenoids, which make it impossible for him to breathe properly. He is over height but under weight, and is not as well developed as a child of his age ought to be, because he can not get into his lungs enough oxygen to make good blood.

This may retard his mental development, making it hard for him to keep up with his school work.

His adenoids ought to be removed and he be kept out of doors day and night if possible. Give simple, nourishing food as per accompanying dietary.

Don't send him to school this year. Build him up first.

2. This child is a credit to an intelligent mother and shows the advantages of breast feeding. She is well developed, in good proportions, and seems in fine condition.

Keep her so by an out-of-door life, regular habits, simple, wholesome food. No eating between meals, no late hours nor moving-picture shows, no crowding in school work.

Her teeth need her constant care and the oversight of a dentist. Decaying teeth mean decomposing food and indigestion.

3. This baby is thin and poorly nourished. He shows that he is not getting the right kind of food. Don't waste your time and his strength experimenting. Take him to a good children's specialist and follow his directions.

He is also overclothed. The band is no longer necessary; it is full of wrinkles and very uncomfortable. Pin his shirt to diaper; also his stockings, which should be long enough to cover entire leg. He may need the short sack night and morning, but don't let his body get wet with perspiration, as it makes him susceptible to colds.

Change all clothing at night and air thoroughly. He ought to sleep only in shirt, diaper, and gown (flannelette in winter and muslin in summer). If he can sleep in a protected corner of the porch he will become less susceptible to colds. In that case make sleeping bags by accompanying pattern, only drawing in sleeves with draw string in winter to keep his hands warm.

4. This is a tiny baby and needs breast milk. Try to get your own health in better condition so that your milk will not give out. Drink milk and cocoa instead of tea and coffee, eat only simple, nourishing food, have a nap on the porch every day while the baby is asleep, and make up your mind to nurse him six months anyway. You can if you will.

Four-hour intervals will be better both for your baby and yourself.

Your doctor will help you when he sees that neither of you are in good condition.

5. James is a big, well-built boy, has good color, and seems in fine condition, except for his knees, which are too prominent, and his ankles, which are big and bulging on the inner side. He may have walked before his ankles were strong enough to bear his weight or his food may not have contained enough bone-producing elements.

He needs careful feeding and special care to prevent a permanent malformation of the ankle and a flattened arch of the foot. Would suggest the advice of a good orthopedist in selection of his shoes and to give him any possible preventive care.

6. Abram is suffering from faulty feeding. His bow legs and roughened, flaring ribs show that his bones are not developing well, and his teeth are slow in coming, because he needs a food with more bone-producing material. Cows' milk is more like mother's milk than the manufactured food you are using. He needs a little orange juice every day. Take him to a milk station, and they will help you secure the best possible food for your baby.

7. Baby Blank seems to be a happy, well-nourished baby. She weighs more than the average child of her age, but has rather more fat than muscle. Her abdominal measurement is greater in proportion to her chest and head than is considered normal. This is probably due to distention of the intestines.

Cream of wheat, bread, and potatoes are more starch than she needs. Don't give potato under 14 to 16 months. Try strained oatmeal, cooked slowly for two hours, instead of cream of wheat, for her constipation. Give also pulp of stewed apples, peaches, or prunes every day in addition to the orange juice. A tablespoonful of beef juice squeezed from a bit of lightly broiled round steak is better for a child of her age than so much starchy food.

Teach her habits of regularity in order to overcome her constipation.

APPENDIX 3.

TABLE OF WEIGHTS AND MEASURES.

Used as a standard of comparison for the Children's Health Conference in the exhibit of the Children's Bureau in the Panama-Pacific Exposition. Figures for children of 3 years and under are obtained from the more-detailed anthropometric table published by the Council on Health and Public Instruction of the American Medical Association and are based on measurements of 4,490 babies in 23 States. As this table does not go above 42 months, the figures for the older children are taken from Holt's measurements.

Age.	Weight.		Height.		Head.		Chest.		Abdomen.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Birth.....	7.55	7.16	20.6	20.5	13.9	13.5	13.4	13.0	16.875	16.375
6 months.....	17.875	16.0	26.50	25.875	17.5	17.0	17.375	16.75	17.125	16.625
1 year.....	21.25	20.875	29.375	28.75	18.5	18.25	18.375	18.125	17.875	17.575
2 years.....	27.5	26.625	33.5	33.5	19.375	19.0	19.624	19.5	18.75	19.0
3 years.....	32.125	30.75	37.125	36.375	20.0	19.5	20.5	20.0	19.675	19.75
4 years.....	36.0	35.0	38.0	38.0	19.7	19.5	20.7	20.7		
5 years.....	41.2	39.8	41.7	41.4	20.5	20.2	21.5	21.0		
6 years.....	45.1	43.8	44.1	43.6			23.2	22.8		
7 years.....	49.5	48.0	46.2	45.9			23.7	23.3		
8 years.....	54.5	52.9	48.2	48.0			24.4	23.8		
9 years.....	60.0	57.5	50.1	49.6			25.1	24.5		
10 years.....	66.6	64.1	52.2	51.8	21.0	20.7	25.8	24.7		
11 years.....	72.4	70.3	54.0	53.8			26.4	25.8		
12 years.....	79.8	81.4	55.8	57.1			27.0	26.8		
13 years.....	88.3	91.2	58.2	58.7			27.7	28.0		
14 years.....	99.3	100.3	61.0	60.3			28.8	29.2		
15 years.....	110.8	108.4	63.0	61.4	21.8	21.5	30.0	30.3		
16 years.....	123.7	113.0	65.6	61.7			31.2	30.8		

APPENDIX 4.

ANNOUNCEMENT AND ENTRY FORM OF THE SEATTLE JUNIOR EXPOSITION.

"Character is determined by the use of leisure time."

CHILD-WELFARE EXHIBIT,

May 22 to 30, 1914.

JUNIOR EXPOSITION,

Saturday, May 23, 10 a. m. to 10 p. m.

CENTRAL COURT OF THE ARMORY.

An exposition of the work of the boys and girls of Seattle, to show something of their skill, perseverance, and ingenuity, and how they use their leisure time.

PLAN.

Open to all boys and girls of Seattle under 16 years of age, residents of the city. Exhibitors will be classified according to age: Entry A, under 13 years of age; Entry B, under 16 years of age.

This exposition, for one day, will include anything made by a boy or girl outside of school hours.

EXHIBITS.

All entries must have been made by the exhibitor outside of school hours. In the department of pets the entries must be the property of the exhibitor.

AWARDS.

All entries will be judged by competent judges, who will award—first prize, blue ribbon; second prize, red ribbon—to all those deemed worthy.

No entries received after May 18.

Bring or send your article to the armory at 9 a. m. Saturday, May 23, 1914.

Labels or cards of identification will be supplied to secure uniformity.

DEPARTMENTS.

(All work made by the exhibitors.)

Gardening.—Exhibits of fruit, flowers, and vegetables raised by the exhibitor.

Woodwork.—Furniture, tables, chairs, boxes, cabinets, shelves, etc. Wood turning, bowls, vases, cup frames, etc. Patterns for castings.

Toys.—Toys of all kinds, of any material; boats, windmills, automobiles, engines, aeroplanes, games, etc.

Electrical and mechanical.—All kinds of electrical or mechanical apparatus. Current can be supplied if necessary.

Printing.—Samples of amateur work. Billheads, cards, etc.

Arts and crafts.—Entries must show design and hand skill. Baskets, books, booklets, block printing, stenciling, leather work, weaving, etc.

Domestic science.—Bread, canned and preserved fruit and vegetables; menus, etc.; household appliances.

Domestic art.—Coats; woolen, silk, and cotton waists or skirts; one-piece dresses, gowns, aprons, bags, collars, cushions, scarfs, slippers, caps, etc.; hand-woven mats and rugs; 9 to 12 inch doll, dressed in hand-made garments; patching, darning, etc.

Millinery.—Handmade buckram or wire frames, infants' and children's bonnets, girls' hats, 12 to 16 years; bows, flowers, etc.

Pets.—All kinds of pets owned by the exhibitor. Dogs, cats, poultry, rabbits, squirrels, birds, fish, turtles, etc.

Each exhibitor must provide for the care of his exhibit.

Junior Exposition Committee of the Child-Welfare Exhibit: Ben W. Johnson (chairman), Harry L. Delts (director), Anna E. Grady, Low S. McKean, Susan E. Campbell, Lila M. Delano, William P. Casey, Harry B. Cunningham, Laurance H. Lemmel, Samuel C. Olson, Ed J. Turner.

ENTRY FORMS.

The attached form blank should be filled out as directed by every boy or girl who expects to participate in this exhibit.

(Cut here.)

ENTRY FORM.

Name ----- Age -----

Address: No. ----- Street -----

School, club, or where employed -----

Article ----- Department -----

N. B.—Make but one entry on this form. As soon as filled out return it to the principal of your school or send it to Mr. Johnson, Room 338, Central Building. Phone Main 2844

APPENDIX 5.

THE EXHIBIT OF THE CHILDREN'S BUREAU AT THE PANAMA-PACIFIC EXPOSITION.

In preparing its exhibit for the Panama-Pacific Exposition the Children's Bureau decided to center its attention on a "Children's Health Conference"; to group around this charts, models, and living demonstrations on infant welfare, home play, and child labor; and to maintain at the same time an information bureau to direct inquirers to other exhibits on the fair grounds dealing with phases of child welfare. To the charts and models prepared in Washington, and illustrating the work of the bureau, were added carefully chosen exhibits loaned by local organizations. Local organizations also furnished living exhibits and demonstrations and cooperated with the bureau in conducting both the conference and the exhibit. Different hospitals assigned nurses for regular hours each day to assist in the examination room. Different women's clubs acted as hostesses and explainers in the exhibit for periods of two weeks each.

A list of the exhibits will serve to indicate the extent of this cooperation and may prove suggestive to communities planning to hold child-welfare exhibits. All permanent exhibits not otherwise designated are the property of the bureau, and will be loaned for use on application by local exhibitors after December 4, 1915. Duplicates of the lantern slides and photographic copies of the panels (size 20 by 40 inches) are available immediately.

CATALOGUE OF THE EXHIBIT.

LIVING DEMONSTRATIONS.

Children's health conference.—Free medical examination of children under 15 years, 10 to 12, 2 to 5, except Saturdays, Sundays, and Wednesday afternoons.

Baby clinic.—Wednesdays 2 to 5, demonstration clinic showing baby hygiene work as carried on in San Francisco under the Certified Milk and Baby Hygiene Committee of the Association of Collegiate Alumnae, and the Associated Charities.

Food for children.—Mondays, Wednesdays, and Fridays, 2 to 5 p. m.; Baby feeding and preparation of milk, in charge Certified Milk and Baby Hygiene Committee, Association of Collegiate Alumnae.

Tuesdays, Thursdays, and Saturdays: Preparing food for young children, in charge Department of Nutrition, University of California.

Home play.—Demonstrations of home toy making, painting, basket making, and use of back-yard apparatus, in charge recreation authorities of San Francisco and Oakland and Columbia Park Boys' Club.

PERMANENT EXHIBIT.

Our thirty million children.—Large moving panorama showing the number of children dying before the age of 5 years and the number in school or at work at various ages.

Infant welfare.—Fifteen wall frames, 3 by 6 feet, dealing with birth registration; prenatal care; the relation of infant mortality to poverty, ignorance, and bad surroundings; the importance of breast feeding and rules for nursing the baby; artificial feeding and pure milk; the working mother; and mothers' pensions. (Smaller reproductions of 12 of these panels, 20 by 40 inches, are available for loan to local exhibits.)

Village of 100 homes, a model loaned by the North Carolina Board of Health, illustrating by flashing and fading lights the number of babies dying before the end of the first day, the first week, the first month, the first year, and the second year.

Fifty-two slides (shown by an automatic stereopticon) on infant care, including prenatal care, breast feeding, artificial feeding, the baby in the home, summer and winter care.

Red star, fading every 10 seconds, and bearing the inscription, "Every time this star fades, somewhere in Europe or the United States a baby dies; one every 10 seconds, 6 every minute, 360 every hour; half these deaths are preventable."

Glass case, containing soothing sirups and patent medicines obtained from the Department of Agriculture, Bureau of Chemistry, warning parents against the use of such remedies and showing the contents of each specimen.

Small booth on the baby in the home, showing clothing for the baby, a baby's bed properly made and protected from drafts, a basket substitute for a crib, proper utensils for a baby's bath, and a play pen with sanitary toys. Occasional demonstrations are given in this space by the nurse.

A glass case containing a food exhibit prepared by the department of nutrition, University of California, showing the right kinds of food for a young child, the method of preparing those foods for different ages, and the relative value of various foods for building bone, muscle, and flesh, for supplying heat and energy, or for enriching the blood with iron.

A metal sphere showing the proportion of baby deaths in the United States due to various causes.

A metal cone showing how cities in the United States spend their money.

Model of a baby's stomach at birth.

Models of a typical case of adenoids.

Models of normal stools of small baby and stools showing diarrhea. (Used only in the conference room with mothers.)

Models made by the Pasadena High-School girls' class in sanitation, illustrating an effective way of giving a class a knowledge of hygiene. One of these models traces the course of a typhoid epidemic, showing that it is carried by water pollution; the other shows a good and a bad dairy.

Home play.—Three wall frames dealing with the requirements of a comprehensive plan of public recreation, the need of home play for small children, and the proper equipment in house and yard.

Home play yard, loan exhibit from the San Francisco public schools, showing ladders, slide, sand box, and balance beam. (See illustration No. 2.)

Home playroom, containing toys made by children from simple materials. Used as demonstration room.

Children's interests. A collection of articles made by children and secured through the San Francisco schools, the recreation authorities of San Francisco and Oakland, and the Columbia Park Boys' Club.

A revolving wing frame, showing the playgrounds of Oakland.

A scrapbook showing some recent ideas in recreation, including the municipal camp in Los Angeles, the Amenia field day, the play school of the University of California, the Public Schools Athletic League of New York City, and the playground equipment and facilities of Chicago.

Child labor.—Five wall frames containing statistics from the United States census on the number of children gainfully employed and their distribution by age, sex, and geographical division, industry, and occupation.

A map model showing by age and sex groups the proportion of working children in different sections of the country.

Twelve transparencies containing photographs of the typical occupations of children in the United States.

Information bureau.—A set of the publications of the Children's Bureau.

A small collection of recent pamphlets published by national societies working for children.

Scrapbooks on State child-welfare exhibits, local child-welfare exhibits, traveling child-welfare exhibits.

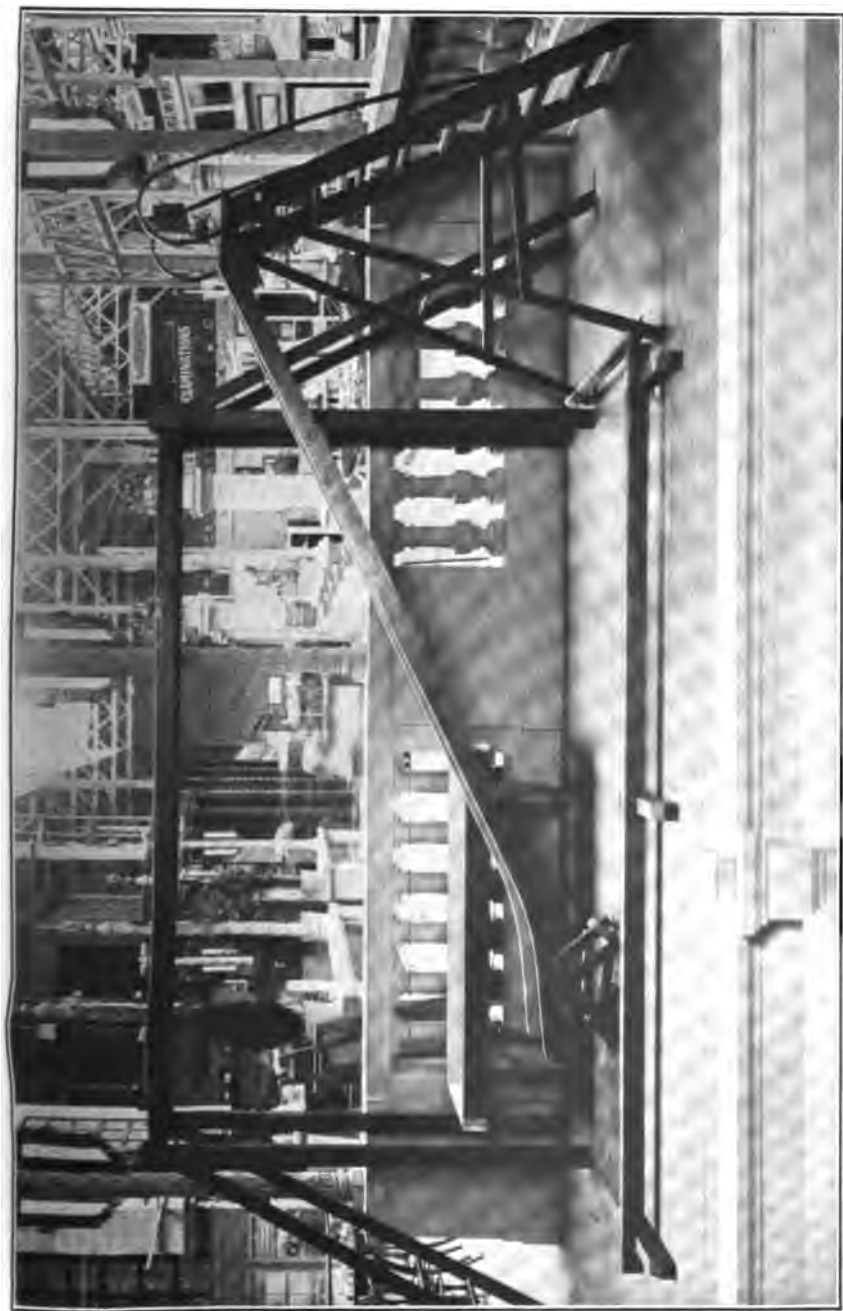
Information concerning exhibits in the exposition dealing with child, etc.



NO. 1.—CHILDREN'S HEALTH CONFERENCE. DOCTOR, NURSE, PARENT, AND CHILD ARE SEPARATED FROM THE GENERAL PUBLIC BY A GLASS WALL THROUGH WHICH THE EXAMINATION CAN BE SEEN.



NO. 2.—HOME-PLAY EXHIBIT.



NO. 3.—BALANCE BEAM AND SLIDE IN HOME-PLAY EXHIBIT.

BABY'S FOES

CAPTAINS OF THE HOSTS OF DEATH
ARE
POVERTY
IGNORANCE
BAD SURROUNDINGS.



THOUSANDS AND THOUSANDS OF BABIES
ARE KILLED BY THESE FOES

OTHERS WHO SURVIVE STRUGGLE THROUGH
LIFE BEARING SCARS MADE BY THEM.

NO. 4.—WALL PANEL FROM THE EXHIBIT OF THE CHILDREN'S BUREAU,
SHOWING THE USE OF CARTOONS.

WHAT MOTHER'S MILK DID FOR THIS BABY

THIS BABY WAS ARTIFICIALLY FED AND HAD DIARRHOEA.

SEPT.
19.
1912.



AGE
3
MONTHS.
WEIGHT
4 LB.
3 OZ.

"ONLY A NURSING MOTHER CAN SAVE THIS BABY"
A CHILDREN'S AID SOCIETY FOUND
THE NURSING MOTHER.

THE
SAME
BABY



JAN. 30.
1913.
WEIGHT,
12 LBS.

IS EASY TO DIGEST.
PROTECTS AGAINST
SUMMER DIARRHOEA
AND
OTHER DISEASES.
BUILDS BONE AND FLESH

NO. 5.—WALL PANEL FROM THE EXHIBIT OF THE CHILDREN'S BUREAU,
SHOWING AN ARRANGEMENT OF PHOTOGRAPHS AND STATEMENTS
PASTED ON A LARGER BACKGROUND WHICH FORMS THE UNIT OF
CONSTRUCTION.

COLDS & PNEUMONIA

**A GROWN PERSON'S COLD
MAY BRING**

TO THE BABY

**ABOUT $\frac{1}{2}$ OF ALL BABIES DYING UNDER
ONE YEAR OLD, DIE FROM PNEUMONIA AND
BRONCHITIS. U. S. CENSUS, 1918.**



**PROTECT THE BABY
AGAINST ITS MOTHER'S
COLD.**



**NEVER KISS THE
BABY ON THE MOUTH.**



KEEP THE BABY AWAY FROM CROWDED PLACES

NO. 6.—WALL PANEL FROM THE EXHIBIT OF THE CHILDREN'S BUREAU,
SHOWING A COMBINATION OF PHOTOGRAPHS AND CARTOONS.

ARTIFICIAL FOOD

IF THE DOCTOR SAYS
THE BABY MUST BE ARTIFICIALLY FED
GET HIM TO SHOW YOU HOW



GET BOTTLED MILK



FROM CLEAN COWS



KEEP IT COOL



MIX BY DOCTOR'S ORDERS

CLEAN COW'S MILK
MIXED WITH WATER AND SUGAR AS THE DOCTOR DIRECTS
TO SUIT EACH BABY
IS THE BEST SUBSTITUTE FOR MOTHER'S MILK
FOR NORMAL BABIES.

NURSING THE BABY

ALMOST
EVERY
MOTHER

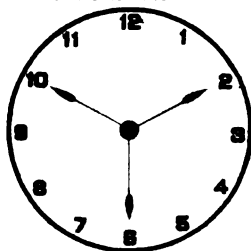
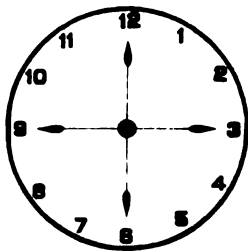


CAN
NURSE
HER BABY

NURSE THE BABY IF POSSIBLE FOR 9 MONTHS
EVEN IF SOME ARTIFICIAL FOOD IS NECESSARY IN ADDITION.

ESPECIALLY AVOID WEANING IN THE EARLY MONTHS
OR IN SUMMER

NURSE THE BABY REGULARLY



(EXCEPT IN THE MIDDLE OF THE NIGHT)

DO NOT NURSE BY GUESS WORK,
NOR EVERY TIME HE CRIES.

GIVE THE BABY A DRINK OF
WATER
BETWEEN FEEDINGS, ESPECIALLY IN SUMMER.

CARE BEFORE BIRTH

**BIRTH IS NOT THE BEGINNING OF LIFE
BABIES ARE ALIVE
AND CAN BE SERIOUSLY INJURED
BEFORE BIRTH.**



**A HEALTHY
HAPPY MOTHER**



**A HEALTHY
HAPPY BABY.**

A MOTHER AWAITING THE BIRTH OF HER BABY
(
GOOD FOOD
PLENTY OF REST
FRESH AIR
LIGHT EXERCISE
)
A CONTENTED MIND

**IN THE UNITED STATES (REGISTRATION AREA)
IN 1912**



DIED BECAUSE OF CONDITIONS BEFORE BIRTH

**INFANT WELFARE WORK
HAS SAVED THOUSANDS OF BABIES.
BUT
OUR DUTY TO THE BABY BEGINS BEFORE BIRTH.**



NO. 10.—MODEL MADE FOR A CHILD-WELFARE EXHIBIT BY A VOCATIONAL CLASS IN THE ROCHESTER PUBLIC SCHOOLS.



NO. 11.—DENTAL EXHIBIT COMPRISING PHOTOGRAPHS, STATEMENTS, LANTERN LECTURE, DENTAL EQUIPMENT, MODELS OF TEETH, AND A DEMONSTRATION OF DENTAL EXAMINATION, ALL IN ONE 8 BY 12 SPACE, MADE BY THE ROCHESTER DENTAL SOCIETY.

MARKED FOR LIFE

**MENINGITIS AND INFANTILE PARALYSIS
CAUSE LAMENESS PARALYSIS AND DEATH.**



FLIES CARRY THE GERMS OF INFANTILE PARALYSIS



**WE NO LONGER
WHY DO WE LIVE?**



MENINGITIS

FLIES

**SWAT
THE FLY**



**TRAP
THE FLY**

FLIES AND DEATH

Flies breed in manure, garbage, and filth.
**FLIES CARRY DISEASE
CLEAN UP!**

FLIES

**KILL MORE CHILDREN THAN
LIONS, TIGERS OR RATTLESNAKES**

**A FLY MAY LAY 100 EGGS
THESE HATCH IN 24 HOURS
IN ONE SEASON MAY
PRODUCE 1,000,000
MORE**

matter!

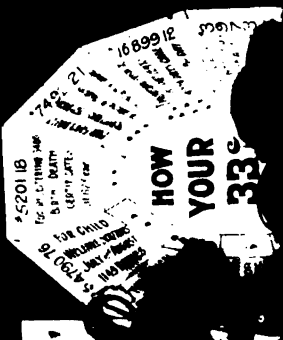
ton!

REGU

COST OF HEALTH

IN 1912

**IT COST YOU \$201.18
\$31 TO GUARD THE CITY'S HEALTH
TOTAL COST \$234.18 FOR USE HEALTH DEPT.**

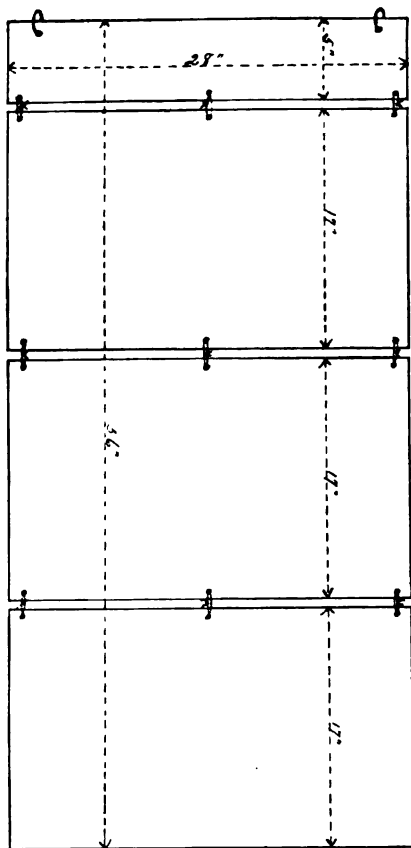


**HOW
YOUR
33%**

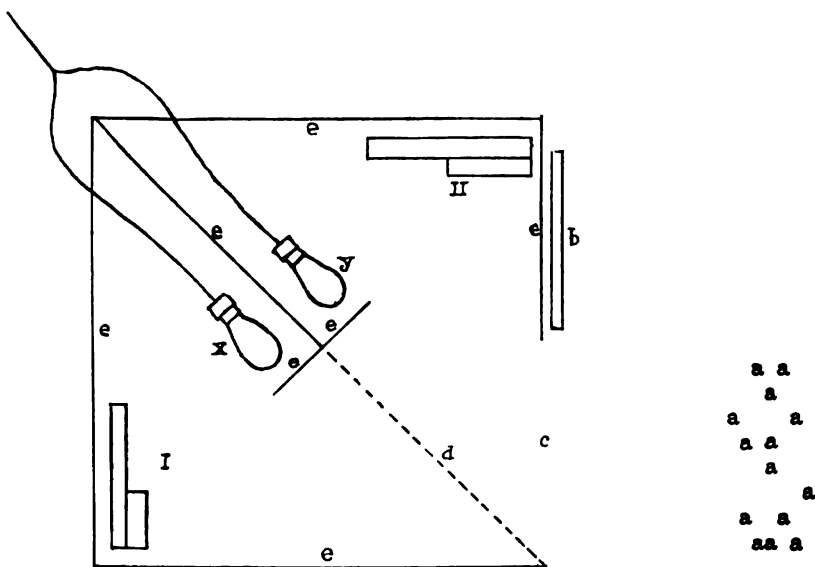
NO. 12.—STARTING A FLY CAMPAIGN AT THE ROCHESTER CHILD-WELFARE EXHIBIT. A COMBINATION OF "LIVING EXHIBIT" WITH CHARTS.



NO. 13.—A GOOD EXHIBIT FOR A LIBRARY IN A COMMUNITY CHILD-WELFARE EXHIBITION IS A CHILDREN'S ROOM IN OPERATION.



NO. 14 —DIAGRAM OF WALL PANEL
COMPOSED OF CARDS.



NO. 15.—CROSS SECTION OF AN "ILLUSION." (SIDE VIEW WITH DOOR REMOVED.)

- a. Position of spectator, kept at distance by railing or screen with peephole.
- b. Descriptive sign on front.
- c. Opening through which model is seen.
- d. Glass.
- e. Inside walls, finished in dull black paper.
- x and y. Lights attached to flasher.
- I and II. First and second view of model.

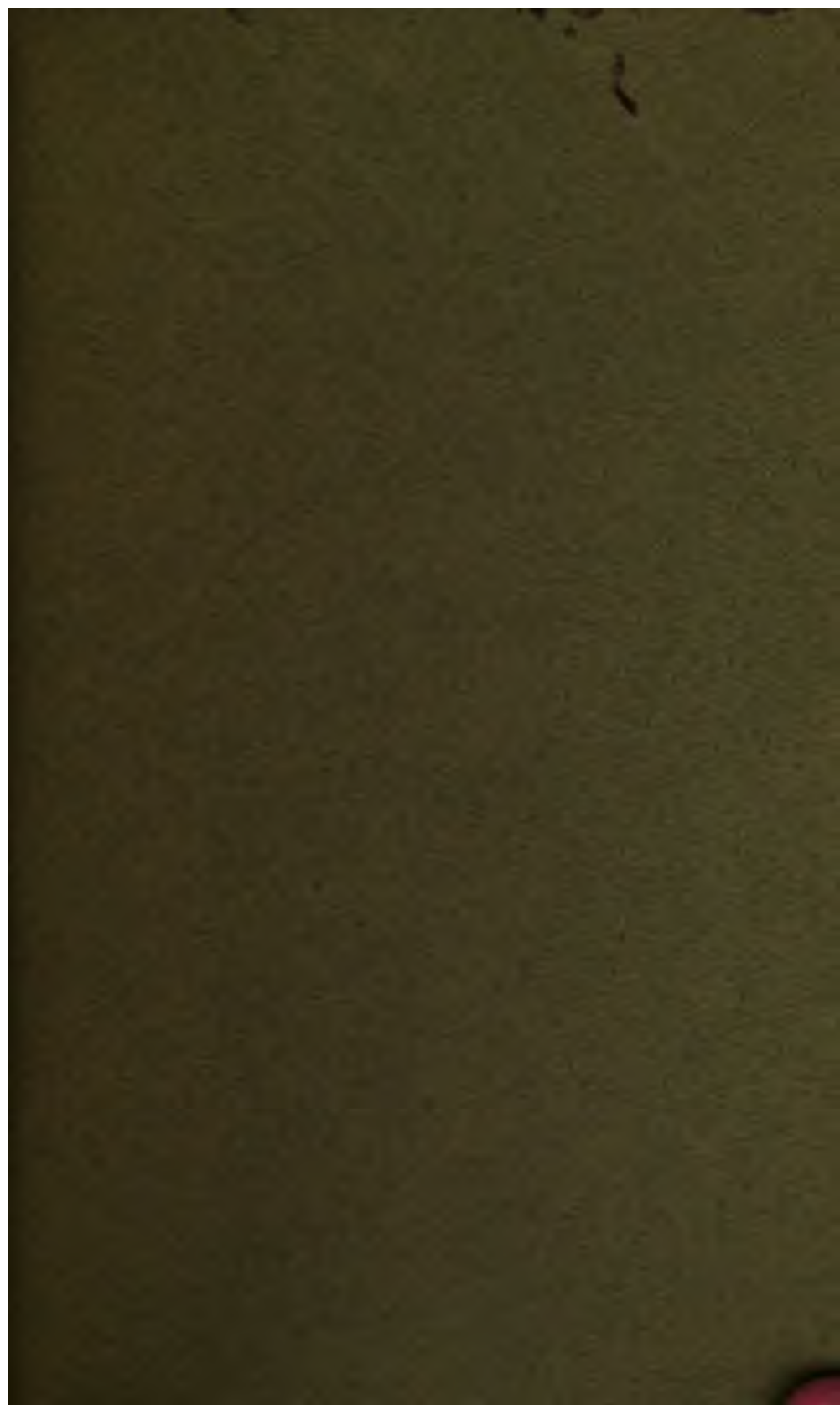
When light x is on, model I is illuminated and is seen through glass d; when light y is on and light x is off, glass d becomes a mirror because of the dark box behind it, and reflects model II.

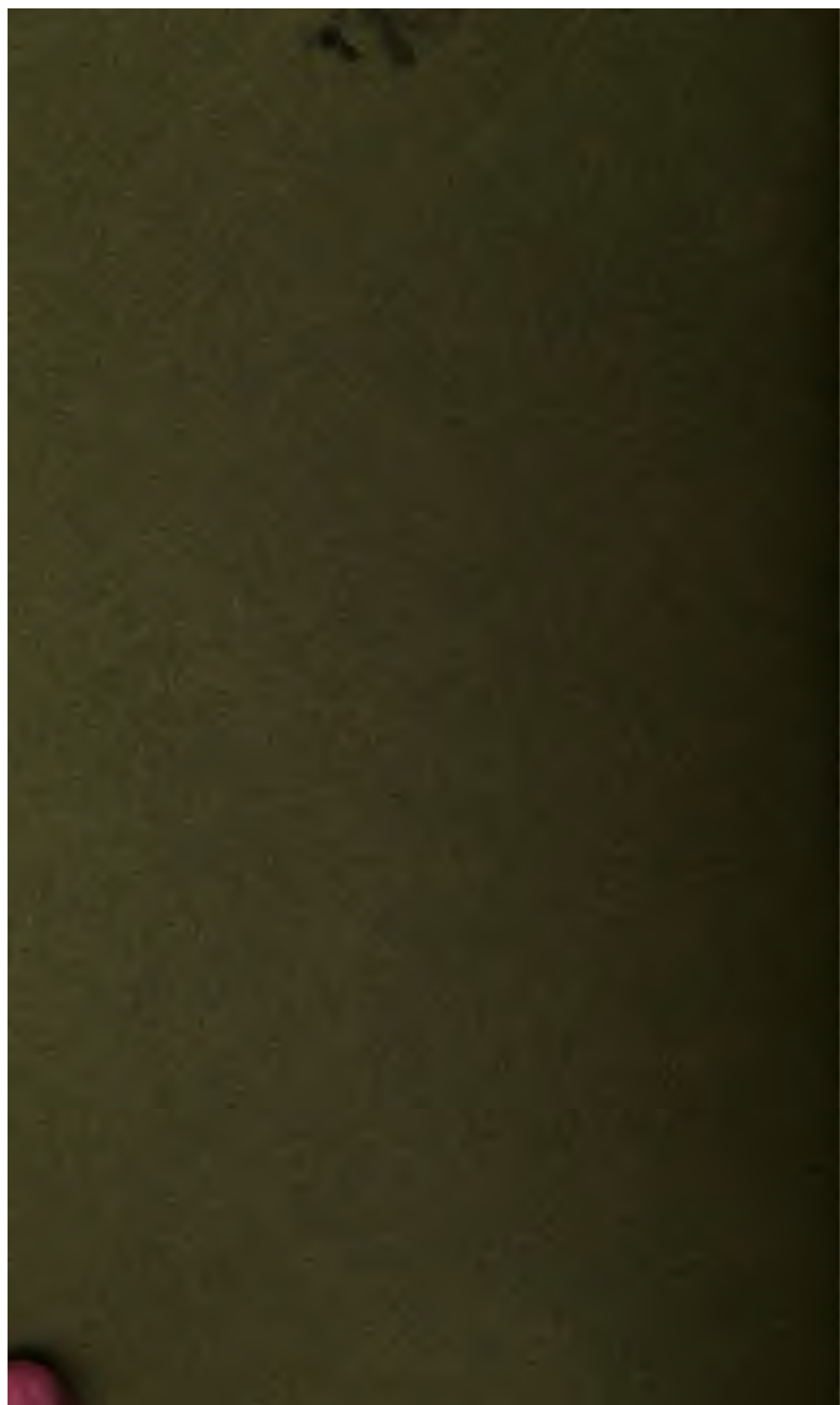


.

.

.





50c 2270.7

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

BABY-WEEK CAMPAIGNS

SUGGESTIONS FOR COMMUNITIES
OF VARIOUS SIZES

MISCELLANEOUS SERIES No. 5

Bureau Publication No. 15



WASHINGTON
GOVERNMENT PRINTING OFFICE
1915

PUBLICATIONS OF THE CHILDREN'S BUREAU.

Annual Reports:

- First Annual Report of the Chief, Children's Bureau, to the Secretary of Labor, for the fiscal year ended June 30, 1913. 29 pp. 1914.
Second Annual Report of the Chief, Children's Bureau, to the Secretary of Labor for the fiscal year ended June 30, 1914. 19 pp. 1914.
Third Annual Report of the Chief, Children's Bureau, to the Secretary of Labor, for the fiscal year ended June 30, 1915. 26 pp. 1915.

Care of Children Series:

- No. 1. Prenatal Care, by Mrs. Max West. 41 pp. 3d ed. 1913. Bureau publication No. 4.
No. 2. Infant Care, by Mrs. Max West. 81 pp. 1914. Bureau publication No. 5.

Dependent, Defective, and Delinquent Classes Series:

- No. 1. Laws Relating to Mothers' Pensions in the United States, Denmark, and New Zealand. 102 pp. 1914. Bureau publication No. 7.
No. 2. Mental Defectives in the District of Columbia: A brief description of local conditions and the need for custodial care and training. 39 pp. 1915. Bureau publication No. 13.

Infant Mortality Series:

- No. 1. Baby-saving Campaigns: A preliminary report on what American cities are doing to prevent infant mortality. 93 pp. 4th ed. 1914. Bureau publication No. 3.
No. 2. New Zealand Society for the Health of Women and Children: An example of the methods of baby-saving work in small towns and rural districts. 19 pp. 1914. Bureau publication No. 6.
No. 3. Infant Mortality: Results of a field study in Johnstown, Pa., based on births in one calendar year, by Emma Dutz. 93 pp. and 9 pp. illus. 1915. Bureau publication No. 9.
No. 4. Infant Mortality in Montclair, N. J.: A study of infant mortality in a suburban community. 36 pp. 1915. Bureau publication No. 11.

Industrial Series:

- No. 1. Child Labor Legislation in the United States, by Helen L. Sumner and Ella A. Merrill. 1915. Bureau publication No. 10.
Analytical tables of laws of all States and text of laws of each State.
No. 2. Administration of Child Labor Laws:
Part I. Employment Certificate System, in Connecticut. 69 pp. 1915. Bureau publication No. 12.

Miscellaneous Series:

- No. 1. The Children's Bureau: A circular containing the text of the law establishing the bureau and a brief outline of the plans for immediate work. 5 pp. 1912. Bureau publication No. 1.
No. 2. Birth Registration: An aid in preserving the lives and rights of children. 29 pp. 3d ed. 1914. Bureau publication No. 2.
No. 3. Handbook of Federal Statistics of Children: Number of children in the United States, with their sex, age, race, nativity, percentage, and geographic distribution. 106 pp. 2d ed. 1914. Bureau publication No. 5.
No. 4. Child-Welfare Exhibits: Types and preparation, by Anna Louise Strong, Ph.D. 58 pp. 1915. Bureau publication No. 14.
No. 5. Baby Week Campaigns. Suggestions for communities of various sizes. 64 pp. 1915. Bureau publication No. 15.

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU
JULIA C. LATHROP, Chief

BABY-WEEK CAMPAIGNS

SUGGESTIONS FOR COMMUNITIES
OF VARIOUS SIZES

MISCELLANEOUS SERIES No. 5
Bureau Publication No. 15



WASHINGTON
GOVERNMENT PRINTING OFFICE
1915

Harvard College Library
Jan. 11, 1916.
From the
United States Government

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
10 CENTS PER COPY

CONTENTS.

	Page.
Letter of transmittal	5
Introduction	7
Baby Week in New York and Pittsburgh	8-12
New York Baby Week.....	8
Pittsburgh Baby Week.....	11
Suggestions for baby-week campaign No. 1	12-48
Organizing Baby Week.....	13
General program.....	18
Publicity.....	20
Baby-welfare information.....	23
Program of days.....	25-28
Baby Sunday.....	25
Mass meeting or rally.....	26
Flag day.....	26
School day.....	27
Fathers' day.....	28
Outing day.....	28
Visiting day.....	28
Birth-registration day.....	28
Special features.....	29-43
Informal meetings.....	29
Talks at club and society meetings.....	29
Lantern slides.....	30
Motion pictures.....	30
Plays.....	30
Infant-welfare exhibit.....	31
Baby health conferences.....	35
Follow-up work.....	43-48
Infant-welfare stations.....	43
Public health or visiting nurses.....	47
Instruction of girls in the care of the baby.....	47
Suggestions for baby-week campaign No. 2	48
Reports on baby-week campaigns	52
Appendix	53

LETTER OF TRANSMITTAL.

UNITED STATES DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, November 15, 1915.

SIR: Health authorities unite in saying that public interest is now needed to put into operation methods for infant welfare which are well ascertained and tested. The observance of a Baby Week is an expedient for securing attention to facts about the needs of babies which are well known by scientific authorities and which if popularized will greatly reduce the loss of infant life throughout this country.

The accompanying bulletin, entitled "Baby-Week Campaigns," has been prepared for the purpose of presenting in detail such practicable methods of organizing and carrying on a Baby Week as will be of general application and utility in cities, towns, and rural communities throughout the country. It has been requested especially by the General Federation of Women's Clubs, which has announced its purpose to promote a nation-wide campaign for the observance of Baby Week. The cooperation of many public and voluntary agencies in this nation-wide movement is already assured.

This pamphlet contains the gist of the practical methods used in various cities where successful baby-week campaigns have been carried on, references to sources of information and material, and suggestions for follow-up work. Among the important suggestions for follow-up work are those for the development of infant-welfare stations and of public-health nursing. Much of the material herewith presented has been taken from the publications of the boards and societies which have recently carried on baby-week campaigns in New York City, Pittsburgh, Chicago, Indianapolis, Topeka, and other cities, so that it is largely a record of actual experiences.

The bulletin has been prepared by Dr. Grace L. Meigs, head of the division of hygiene of the Children's Bureau, with the assistance of Mary Swain Routzahn, of New York. Dr. Meigs desires to acknowledge valuable suggestions from many correspondents.

Respectfully submitted.

JULIA C. LATHROP,
Chief.

HON. WILLIAM B. WILSON,
Secretary of Labor.



BABY-WEEK CAMPAIGNS.

INTRODUCTION.

One of the developments of the profound and growing interest in the welfare of babies during the past few years is the Baby Week. The baby-week campaigns, which have been held in many cities, are primarily educational; their purpose is twofold—first, to give to the parents of a community the opportunity of learning the facts with regard to the care of their babies; second, to make known to a community the importance of its babies, the special facts relating to the babies of the community, and the need of permanent work for their welfare. These purposes it carries out in various ways—by newspaper and advertising publicity, by meetings and entertainments, and by such activities as a program of daily events, an infant-welfare exhibit, a baby health conference, plays, etc. In addition, there has been included in some cities the third purpose of gathering funds for infant-welfare work. The first Baby Week, which was held in Chicago in April, 1914, was of this type; also that of Grand Rapids, Mich., in 1915. The conditions and needs for securing money for infant-welfare work and the methods applicable vary so greatly in communities of various sizes that it has been thought best not to consider this type of campaign in the present general bulletin, which will deal only with Baby Weeks whose purpose is solely educational.

A Baby Week having the purpose of making known to parents and to the whole community facts which they should know about babies may be held successfully in communities of all sizes. The form that such a Baby Week may take will, however, vary greatly in different places. A rural community will probably not wish to carry out the elaborate program which would seem necessary in a big city to reach all the people. On the other hand, many large cities may not be ready at a certain time to carry on an elaborate program which will demand considerable expense and the constant labor of many people, but may be anxious nevertheless to bring the subject of babies to the attention of the public to an extent which will achieve substantial results. This bulletin, therefore, will give suggestions for a Baby Week of two different types:

1. A comprehensive baby-week campaign which will be appropriate only for communities of over 5,000 inhabitants, and in such commu-

nities only when a preliminary conference has demonstrated the willingness of many different organizations and individuals to give considerable time and money to the campaign. (See p. 12.)

2. A baby-week campaign which will involve little expense and labor and which can be easily carried out in any community, whatever the size. (See p. 48.) A simple campaign such as this may include, besides the activities suggested, any of the features described for the more complete campaign.

In planning a Baby Week of either type two principal points should be remembered:

First. Baby Week should be a community campaign in which one organization—such as a woman's club, the health department, the local infant-welfare or visiting-nurse society, or any other organization—may take the initiative, but in which all other organizations should be asked to cooperate. One of the greatest benefits to be derived from Baby Week is the fact that it brings together many organizations in a community for a common aim. Added to this is the fact that everyone has a far greater interest in work in which he has had a definite part.

Second. Baby Week should not be a temporary flurry and excitement, the effect of which is allowed soon to subside, but very definite efforts should be made by follow-up work to have it lead to permanent good for the babies of the community.

BABY WEEK IN NEW YORK AND PITTSBURGH.

Descriptions of two campaigns—New York Baby Week, held in June, 1914, and Pittsburgh Baby Week, held in June, 1915—are given below as illustrations of methods and program features of Baby Weeks, having an educational purpose. While the methods and many of the features of these two campaigns are useful only in a very large city, they serve to give a picture of a Baby Week.

NEW YORK BABY WEEK.

The purpose of the campaign in New York City was, first, to drive home to the public the fact that, while great advances had been made in New York in lowering infant mortality, much remained to be done; and, second, to create a widespread interest in the baby-welfare work under way and in the plans for increasing its scope. Such developments included additional milk stations; the development of prenatal care and of the supervision of expectant mothers; cooperation between infant-welfare agencies, public and private, and between these and hospitals; extension of the work of day nurseries, etc.

The decisive first steps for Baby Week were taken when the mayor appointed the Greater New York Better Baby Week com-

mittee, after a conference in which the following organizations took part at his request: Chamber of Commerce, Merchants' Association, Advertising Men's League, Advisory Council of the Board of Health, New York Milk Committee, Federation of Churches, Association of Catholic Charities, New York Board of Jewish Ministers, Federation of Women's Clubs, and New York City Conference on Charities. The personnel of this conference illustrates how broad was the interest in this movement from the very outset.

The slogan adopted for the campaign was "Better babies, better mothers, better city."

Official headquarters for the committee were assigned by the mayor in the Municipal Building, the office of which was temporarily equipped with furniture from other city departments. A paid secretary was put in charge of the office.

PROGRAM.

A detailed account of the features of the New York Baby Week has been published in a pamphlet entitled "Greater New York Baby Week" by the New York Milk Committee, 105 East Twenty-second Street, New York City. The following is adapted from this account:

The following program was made public in the early part of the week preceding Baby Week and all organizations and citizens were asked to visit the special agencies on their appointed days.

Purpose.—To call attention to needs met and needs not met in a campaign for "Better babies, better mothers, better city."

Saturday, June 20.—Baby Sabbath to be observed in Jewish synagogues by reading of mayor's letter in pulpits, by special sermons, and other exercises.

Sunday, June 21.—Baby Sunday to be observed in churches. Illustrated articles in Sunday newspapers.

Monday, June 22.—Little mothers' day to be observed in the public and parochial schools of the city by the reading of a letter from the mayor and the distribution by the children of 1,000,000 pieces of educational literature to mothers.

Tuesday, June 23.—Milk-station day to be observed as "visiting day" in the public and private infant milk stations. Delegations from commercial and civic organizations to visit certain stations in official automobiles.

Wednesday, June 24.—Hospital and clinic day to be observed as above in the hospitals, clinics, and dispensaries.

Thursday, June 25.—Nursery and demonstration day to be observed in the morning at all institutions sheltering well babies, such as day nurseries, temporary shelters, convalescent homes, and asylums. Grand automobile ride for mothers and babies in the afternoon. Awarding of grand prize to winner of better-babies contest.

Friday, June 26.—Outing day, free ferry rides and steamboat excursions for mothers and babies, special music in parks, recreation piers, and playgrounds.

On little mothers' day exercises were held in 78 public schools.

On milk-station day the 84 milk stations throughout the city were visited by delegations of citizens and officials, the aim being to make

better known the influence of these important factors in baby-saving work. The work of the health center of the New York Milk Committee was dwelt upon, as well as the need for further prenatal care.

On nursery and demonstration day there were baby parades in Manhattan, Brooklyn, and Richmond. The prize was awarded to the winner among the 37 babies who had received prizes in previous contests. The babies were rated 60 per cent on their health and 40 per cent on home surroundings and mother's care.

Twenty thousand babies and their mothers were taken out on the river and bay on outing day. On the boats there were a physician and a nurse from the department of health for every group of 50 babies and mothers. Talks were given during the day on the proper care of babies.

PUBLICITY.

The publicity work was very ably carried on by a publicity committee in whose membership were members of the Advertising Men's League and of the press.

A letter was sent a week before Baby Week to the editor of each paper in New York describing the campaign and promising advance information with regard to the programs. For special stories different material was given out for each paper; for the small neighborhood papers an attempt was made to give the articles local interest. Cartoons, editorials, and special articles were secured through an invitation sent to special writers, cartoonists, and editorial writers.

The response was very satisfactory. All the leading dailies and the 200 smaller local and foreign papers published special stories during the week before and daily stories during the campaign. It was estimated that the 230 papers devoted nearly 1,500 columns of space to Baby Week.

Posters, large and small, with a picture of mother and baby and the slogan "Better babies, better mothers, better city," were displayed everywhere on billboards, cars, and in subway and elevated stations. Many illuminated signs were shown, and window cards were displayed in many windows.

Twenty-five thousand educational slips regarding the proper clothing of babies in summer were inserted in packages containing infant wear. (See Appendix, p. 53.) Slips on the care of the baby's bottle and nipples were inserted in drug-store packages. (See Appendix, p. 53.) Tags on the care of the baby's milk were distributed by milk dealers with every bottle of milk.

Slides were exhibited between films in 800 motion-picture houses of the city.

PITTSBURGH BABY WEEK.

The purpose of Pittsburgh's Baby Week was thus summed up in the leaflets freely circulated among those who might be interested in taking part in the campaign:

Fundamentally, the purpose of Baby Week is educational. It seeks:

First. To bring to every Pittsburgher the fact that it is sound civic economy to reduce the sickness and death rates among babies and to improve the coming generation by measures which will keep the baby and mother well before and after the baby's birth. The community's responsibility for its babies is the central thought for Baby Week.

Second. To tell the people of Pittsburgh facts concerning the present status of infant mortality in their city and what is being done, both by public and private organizations, to improve conditions which injuriously affect the health of their babies.

Third. To give directly to the fathers and mothers, the brothers and sisters of babies such information about the care of babies as will result in better care and feeding during the summer months when the mortality rate is especially and needlessly high.

Fourth. To effect a better understanding which may coordinate the various agencies, public and private, which have baby welfare as their primary object, with a view to avoiding duplication and waste of effort and increasing the effectiveness and scope of their work.

The campaign was initiated by the department of health, with the assistance of a large and representative citizens' committee. Nine members of this larger committee were chosen by the chairman to act as a business committee. This smaller committee, working with a director, brought together hundreds of workers, who carried out a program of exhibits, talks, motion pictures, excursions, and widespread publicity designed to arouse the citizens to the importance of saving the 16,000 babies born annually in the city.

A feature of the Pittsburgh campaign was that its message was directed largely to the members of the family—the father and the brother and sister, as well as the mother; and the methods of the campaign made it possible to make sure that much of the educational matter reached directly the citizens for whom it was intended.

Fathers were honored by the setting aside of a fathers' day, when a message to fathers was published in the newspapers and distributed to men at meetings held in various parts of the city.

For brothers and sisters there were also a special day and a message. In advance of Baby Week, printed letters were sent by the committee to the school children of the entire city. Among other things, they were told what Baby Week was for:

It is to make everybody, old and young, think about the best things to do for babies and learn more about how to keep them well. If you keep your eyes and ears open that week you will hear about babies in the street cars, nickel-odeons, churches, parks, stores, and newspapers.

The girls who belonged to the little mothers' clubs were given an outing on brothers' and sisters' day, and the newspapers carried stories of some of the achievements of these little workers for better babies.

Every day was, of course, mothers' day, although one special day was set aside for an outing for the mothers who brought their babies regularly to the milk stations of the health department. There were meetings for the mothers in the eight district campaign centers scattered over the city, and thousands of pamphlets on the care of the baby were distributed.

To mothers whose babies had been registered with the health department, boys delivered gay little banners on flag day bearing the baby-week emblem, together with envelopes containing baby-week programs and this message:

The city of Pittsburgh presents you with this flag and asks you to display it in your window in honor of your baby. All homes where there are babies will receive flags, to show that all Pittsburgh is thinking and working for the best chance for the babies.

One means of making sure that homes of babies were reached was the use of district centers in the most congested parts of the city, with local committees in charge of meetings and distribution of literature in each district. Band concerts and motion-picture programs were given in parks in the various sections, supplementing the meetings held at the district headquarters. Committees from these centers also organized parties to attend the infant-welfare exhibition.

The central feature of the week was this exhibition, prepared under the direction of an exhibit expert and held on three floors of a railway station. The contrasting kitchens and bedrooms of the Do Care family and the Don't Care family aroused much interest. A special exhibit of panels and moving devices on the care of the baby was prepared for the occasion and for further use throughout Pittsburgh during the year.

A feature of the exhibition was the daily presentation of two little plays.

The publicity methods in Pittsburgh were largely those described elsewhere in the pamphlet.

SUGGESTIONS FOR BABY-WEEK CAMPAIGN NO. 1.

In this bulletin suggestions will not be given for campaigns in the largest cities, i. e., those having over 500,000 inhabitants. Such communities, if they undertake elaborate programs, without doubt will wish to work out original methods. The descriptions of the campaigns in New York City and in Pittsburgh, before given, may

be of assistance in making the first plans. Additional information with regard to these, as well as others, may be obtained from the following sources:

Chicago Infant Welfare Society, 104 South Michigan Avenue, Chicago, Ill.; Chicago Health Department, Chicago, Ill.; "Greater New York Baby Week," published by the New York Milk Committee, 105 East Twenty-second Street, New York City; "Good Fare, Good Care, and Fresh Air for Every Pittsburgh Baby," The American City, November, 1915; Children's Aid Society, 88 Baldwin Block, Indianapolis, Ind.; Division of Child Hygiene, Kansas State Department of Health, Topeka, Kans.

The following section will be devoted to suggestions for a Baby Week in a city of less than 500,000 but of more than 5,000 inhabitants. Many of the features here described will be appropriate in communities both larger and smaller.

ORGANIZING BABY WEEK.

THE FIRST STEP.

Probably the initiative in a Baby Week will come from an organization which has agreed that it would be a valuable undertaking. The first move should be to enlist the cooperation of representatives of all organizations and interests in the community. The organization beginning the movement may be a woman's club, the city department of health or other city officials, the local infant-welfare or visiting-nurse society, the chamber of commerce, or any other organization. This organization or a committee of its members should make a study of all the other groups in the community who might reasonably be expected to take an interest in the movement and call a meeting to consider the matter.

In cities of various sizes the number and names of the organizations to be called upon will vary greatly; in any community, however, the attempt should be made to enlist the help of all agencies naturally interested in child welfare and also of all organizations representative of the varied interests of the community. This would ordinarily include the mayor and city officials; the city health department, especially its division of child hygiene or child welfare, if this exists; all women's clubs; the school board and the principals and teachers of the schools; the local medical society; the local infant-welfare society; the local visiting-nurse society; the churches; all charitable organizations and settlements; the Camp Fire Girls; the Boy Scouts; the playground authorities; the newspapers; chamber of commerce; other business men's organizations; labor unions; fraternal orders, etc.

A meeting of representatives of these organizations should be called for the purpose of proposing the Baby Week and obtaining an expression of opinion as to the advisability of undertaking it and the strategic time for holding it. Such an expression of opinion is important, because a generous cooperation from all organizations is essential to the campaign and can be counted upon only if the various groups have registered their approval of the plan at the start.

The group which calls the meeting should have a clear idea to present as to a suitable time for holding Baby Week, certain results that they hope to accomplish, an approximate amount of money that Baby Week is likely to cost, and in a general way the scope of the campaign. It would be the business of the meeting to pass on these suggestions and to appoint an organization or executive committee to draw up a definite plan embodying the suggestions agreed upon. This committee (with the help of an adviser if the campaign is to be an extensive one) will map out a detailed scheme for the whole campaign, to be carried out under its own direction if the meeting has authorized this step, or to be submitted again to a second general meeting if that has been the general desire.

It has been pointed out that in coming to a decision to hold a Baby Week important considerations are the time for holding it and the cost.

Time.—Usually there is an advantage in holding Baby Week in the spring, for the reason that the death rate of babies is highest in the summer months, and the educational work therefore will have the greatest value if it is fresh in the minds of the people when the summer arrives. A comprehensive campaign should be set for a time at least two or three months, preferably six months, distant from the date on which the decision to carry it out is reached. This interval is necessary in order to allow ample time for careful selection of committees, for planning details, and for allowing clubs and schools to so arrange their programs that they will be in a position to cooperate when the time comes. A simple campaign may be arranged, however, in a shorter period.

Cost.—Although the most natural question to ask is "What will Baby Week cost?" it is the most difficult question to answer—partly because the circumstances under which Baby Weeks have been held in the past have been so varied that no one of them offers a precedent for other cities; and partly because, given a certain type of Baby Week, the cost will vary in different communities. In one place certain contributions of service and material will be available that can not be obtained in another; for example, while New York spent only about \$650 in actual cash, the committee estimated that an advertising campaign of the same scope conducted on a commercial basis would have cost not less than \$200,000. Much of the service and the

advertising that made this campaign possible would not be available in a smaller city or in a city where the machinery for getting people together was not so well organized. In Pittsburgh it was estimated at the beginning that the campaign would cost \$10,000; ultimately the actual cost was reduced to \$6,000 through the omission of certain features and the obtaining of unexpected contributions of service and printed matter.

Even a small amount, if the committee can reasonably hope to raise only a limited sum, will pay for some sort of a campaign. As a guide for those who are uncertain as to how much they ought to invest a list is given below of the kinds of service and materials that should be obtained either through contributions or through money payments in order to carry out a campaign of the type to be described.

1. An item that is to be taken into account in any sort of campaign is the printed matter. Here, as can readily be seen, the cost will vary greatly, according to the size of the community, the extent of the campaign, and the amount that can be obtained as a contribution or as a deduction from the usual rates. The list of printed matter given under the publicity section may serve as a basis for estimating the kinds of printed matter which may be needed.

2. Another assured item of expense is postage, which will also vary greatly. This, however, is one of the places where it seems least advisable to save, since much can be accomplished through distributing widely the printed matter, requests for service, announcements, and invitations of the campaign.

3. The cost of program features, such as plays, meetings, and outings, should be small. In any campaign that is sufficiently enthusiastic to arouse the interest of large numbers of workers, almost all of the needed materials and service could well be contributed or lent.

4. The cost of administration is one of the items which, while adding to the expense in one direction, is quite likely to be a saving in others; that is, the employment of a secretary or director, unless such services are volunteered, means the saving of considerable confusion and waste that grows out of undirected effort; also sufficient stenographic assistance means that there is an opportunity to get out much material that will help to make the machinery of the campaign run smoothly. Probably the secretary and one or two stenographers will be needed for a period of five or six weeks, including the Baby Week. Allowance may well be made for the services of an outside adviser for advance consultation; even the smaller places would benefit by a one-day visit. Organizations referred to elsewhere as interested in social-welfare campaigns may be able to suggest some one for the position of director or adviser.

5. If an exhibit is held, there will be some expense for transportation of borrowed exhibits or for the construction of a small exhibit,

or both. The panels made up cheaply for temporary use are not likely to cost more than \$2.50 to \$3 apiece, including the lettering. There will be some expense for frame work and for incidental expenses, such as cartage. A saving can probably be made in the exhibit construction through obtaining the assistance of manual-training classes in the schools.

6. Such items as hall rent, office rent, telephone, office supplies, lighting, etc., may also be contributed, though some of them may prove to be items of expense.

COMMITTEE ORGANIZATION.

While it may be contended with some truth that multiplying committees often increases the work of the leaders and that in the end a few people may bear most of the burden, yet one of the chief purposes of the campaign is served by giving large numbers of people an opportunity to take part. The extent to which it is possible to make use of large numbers of volunteer workers depends largely on three things:

First. That there shall be time enough allowed for making up committees and assigning their duties before the actual work of preparation begins.

Second. That some one person or small group of persons shall direct the activities of the committees and from time to time check up what has been done.

Third, and most important. That each committee shall receive a very definite and clear-cut assignment of work. This assignment should be given in the form of a written statement, if possible, and should be so planned as not to overlap in any way the assignment of any other committee.

If there is time and supervision is available, it is often desirable to divide up the work into rather small units in order to increase the opportunities for participation in the campaign, and also because many people will respond to a request to do a little work who would not undertake any large responsibility.

A list of working committees that would seem desirable for carrying out the plan of campaign described later is as follows:

Executive committee with administrative subcommittees on finance, volunteer helpers, directory of organizations, automobiles, etc.

Committee on baby-welfare information.

Program committees, including a committee for each daily event and special feature.

Publicity committee, with subcommittees on press, printing, advertising, talks.

The desirability of employing a director or executive secretary depends largely on the extensiveness of the campaign and the avail-

ability of a competent volunteer worker who will give full time to directing the work for a period of weeks. Without such a worker it would not be advisable to undertake more than a few features of the plan given later, since there is certain to be more detailed work than can be carried out successfully through the undirected efforts of a group of committees. It is very important to have stenographic service for sending out directions to committees, requests for service and contributions, material for the newspapers, etc. The success of many of the publicity features, especially, depends on a generous amount of clerical work, part of which can of course be carried out by volunteer helpers.

Executive committee.—This committee should take the final responsibility in all matters of policy and detail of the campaign management. If it seems advisable to have a large committee, it is suggested that a few members, not more than seven, be made a subcommittee with power to act on all matters of detail, after the larger committee has adopted a general plan covering all the principal features of the campaign. At the close of the campaign the executive committee should not be dissolved until all the affairs of the campaign are finally settled and a committee on follow-up work is appointed.

Finance committee.—The finance committee should be appointed at the time it is decided to undertake the campaign. Methods for raising money for the campaign should be worked out on the lines which experience has shown are practicable in the community.

Volunteer helpers.—In addition to the workers on the committees who have definite assignments of work, there is sure to be a need for volunteer workers who are ready to give one day a week, or more, to performing various services, such as clerical work at the headquarters. They will be needed in the office for addressing envelopes, making lists, clipping newspapers, writing notices of meetings, receiving visitors, answering the telephone, arranging printed matter for distribution and performing other kinds of service. A simple and effective method of organizing the committee on volunteer helpers is for the chairman to appoint one member of his committee to be responsible for the necessary helpers for a certain day each week during the month or more of active preparation.

Directory of organizations.—One of the first needs of the organizing or executive committee will be a card catalogue of organizations of all kinds in the community. This will be used in selecting committees and later in sending out circular letters and for general reference.

The necessary information for the directory of organizations may be obtained from the city directory, the classified section of the telephone book, well-informed individuals, and many other sources, dif-

fering as the methods differ. The lists should include church societies, civic and social welfare organizations and institutions, athletic, social, and literary clubs, lodges, business men's organizations, trade unions; in fact, any organized group formed for any useful purpose.

Automobiles.—Both during the preparation and during the week itself automobiles will be needed for various purposes, particularly for the parades and the outing. It will probably be found more satisfactory to have one committee in charge of making up lists and of obtaining the use of automobiles for all purposes than to have each committee that has some need for automobiles make its own requests. The committee should begin early in the preparation to make up a list of owners of automobiles or other vehicles who would be willing to loan them, either occasionally or once for a special occasion.

Baby-welfare information.—A committee should be in charge of gathering the facts as suggested in the section of the pamphlet entitled "Baby-welfare information."

Program committees.—Each of the program features that are planned for the week should be in charge of a separate committee, who should receive an outline describing the plan for the event or special feature agreed upon by the executive committee.

Publicity.—In a small campaign probably one publicity committee can readily take charge of all the work. If the campaign is extensive, however, it would be advisable to have at least the divisions suggested in the outline of separate committees on press, printing, advertising, and talks. An advantage in the division is partly that the people most needed would not have time to attend to all the features, and partly because different kinds of publicity require different types of workers. For example, for the press committee it would be well to have the editors or owners and other representatives of all the local papers. This committee should be called upon to advise on questions of policy. Much of the actual newspaper work would probably be done by the secretary, by a specially employed press representative, or by volunteers with newspaper experience who would agree either to prepare copy or to meet the reporters from day to day and give them material.

GENERAL PROGRAM.

The scope of the program to be decided upon in each community will depend upon the available resources. From the following suggested features, or others which may be proposed, those which appear practicable for the particular community may be selected.

The general baby-week program to be decided upon by the executive committee may follow one of three general plans:

1. All the interest may be centered in some one place where exhibits, motion pictures, plays, and meetings serving to draw large

numbers of people are held. In this case practically all the publicity will be directed toward bringing the people to the central place, and in fact all the methods will largely follow those used in conducting a social-welfare exhibition.

2. The second method may be that of spreading the educational work of the campaign throughout the city by means of printed matter, news articles, meetings in schools, churches, and parks, and of daily events, none of it being related to any central place. In this case the headquarters will simply be the office from which the work is directed and the news stories and other information given out.

3. A third plan would be to combine the features of both the first and the second; that is, to have a central feature, not necessarily extensive, together with daily events and with publicity work spread throughout the city. On the whole the third plan seems best, since it combines the advantages of bringing people together with those of carrying much of the educational matter directly to the homes and the neighborhood of the people whom it would be hard to bring to the central place.

The central feature in this case should not be so elaborate as to require the efforts of a large number of people. On the other hand, it should be a place from which the campaign goes out to the city and where people will get a sense of great activity and enthusiasm. One of the following plans for the central feature may be used; it would not seem advisable, however, to use both. (a) Either a headquarters would be maintained in a vacant building in the heart of the business district, where space is set aside for an information booth, a small exhibit, and informal talks with stereopticon slides or motion pictures, and a rest room; or (b) a babies' health conference, supplemented by a small exhibit, may be held, also in a central location.

Some features suggested for central headquarters are:

1. An attractive window display, such as a moving device, a miniature nursery or milk station, or some other object.

2. An information booth just inside the entrance, with large placards on the wall telling of the aims and program of Baby Week. Several people should be present here constantly to answer questions and should have on hand a generous supply of all kinds of printed matter used for Baby Week.

3. A small exhibit, particularly on baby-saving work, rather than an exhibit giving direct instructions on the care of the baby, is a good feature of the headquarters, as the attendance here will be composed largely of people drawn in from the street, as well as of people brought by the general interest aroused through the baby-week publicity. For exhibit suggestions, see page 31.

4. If the size and shape of the headquarters permit, a separate room or a space curtained off may well be used for brief meetings held at intervals throughout the day. At these meetings talks may be given about the objects of Baby Week, illustrated by stereopticon slides, and if the conditions of the hall permit, these may be supplemented by motion pictures on subjects relating to public welfare. In such meetings no one group of people should be held for more than 20 or 30 minutes, as the greatest advantage will come from reaching large numbers of people with a brief message.

5. A rest room with toilet facilities for women will be a useful addition, especially in communities which are the centers of rural districts. Women coming in town to see the exhibit will be very glad to have the use of such a room.

The office for the director or secretary or persons in charge of the campaign should be in the campaign headquarters, if possible, but should be in a separate room, or at least partitioned off in a space where the work may be carried on without interruption from the visitors to the headquarters.

For the second type of campaign center, in which the chief feature is a baby health conference, the following features may be included:

1. An infant-welfare exhibit, dealing either with the care of babies or with the need for infant-welfare work, or both.
2. Equipment for demonstrations in the care of babies and in cooking for babies and young children.
3. A lecture room.
4. A rest room.

PUBLICITY.

As the whole campaign consists of educational publicity, the term as used here may be misleading. The program features and the work of committees, in fact everything that is done in connection with the campaign, has a value in spreading the interest and the news equal to that of the features that are classed for convenience under "Publicity."

The chief avenue of publicity is of course the daily papers. In almost any community the cordial cooperation of the newspapers may be counted upon. It is due the newspaper, however, that the committees planning the campaign furnish material that is really "news," and that they make their campaign so interesting that people are glad to read about it. Probably the first step to take is for the committee to confer with the editors of the daily papers and receive their suggestions as to the methods to be pursued in supplying material. The employment of a press agent depends largely on the question of funds and the availability of some one who can write up the material both sympathetically and in a readable manner.

Following are some of the possibilities of interesting newspaper publicity:

First. A news story when the Baby Week is first decided upon, followed by other stories at intervals. Then daily stories should appear during Baby Week. If the events are made interesting, generous space can probably be counted on each day.

Second. Some papers may be willing to carry a special department during Baby Week, such as a series of articles on the care of babies; a "Question and answer" department; or a series of special stories on baby-welfare work and the local conditions and plans.

It has everywhere been found that the campaign serves to "make news" of the facts about baby welfare, and every article connected with Baby Week, whether it is about the work of a committee or an event of the week may give an opportunity for saying something that adds to the educational work of baby welfare.

For examples of newspaper articles on Baby Week, see Appendix, page 53.

Newspaper syndicates, syndicates sending out material in matrix form, and "ready-print" companies may have material with definite release dates on these subjects which they are ready to furnish to editors.

The Children's Bureau will send on application articles on various subjects connected with Baby Week, which may be adapted for local use.

PRINTED MATTER.

The printing may be divided into three groups: (1) Educational; (2) advertising; and (3) printed forms. If an official emblem and a slogan have been adopted, they should be used on all printed matter. A good slogan is an important feature of the campaign. A local competition for design and slogan gives an excellent bit of publicity when Baby Week is first being planned.

In most cases the educational printed matter, consisting of leaflets and pamphlets on baby care, will not need to be printed locally. Many city and State departments of health, and certain Federal departments, have prepared such material for distribution free of charge or at a small cost. Lists are given on page 55 of the Federal departments and the private organizations from which pamphlets may be obtained. At least 23 State departments of health have issued, and many more are planning to issue, pamphlets on baby care, so that it would be worth while in every case to inquire of the State department of health. As the Baby Week is so largely an educational campaign, the opportunity for the widespread distribution of good pamphlets and bulletins on the care of the baby is a great one and should be made the most of. On the other hand, these pamphlets

should not be wasted. If the special messages to fathers and to brothers and sisters of babies suggested by the Pittsburgh Baby Week are to be used, they will have to be prepared by the local committees. A copy of such a message is given in the Appendix, page 60.

The advertising printed matter may include some of the following. It is hardly likely that any campaign would care to use them all.

First. An advance bulletin of from 4 to 6 pages giving the plans and purpose of the campaign. This is for distribution among possible workers and contributors. This should be of a size to inclose in a letter-size envelope without folding.

Second. A program of events, on a single sheet, for wide distribution.

Third. Large cloth pennants with the baby-week dates and slogan, to be hung from wires across the principal streets.

Fourth. Inclosure slips, stickers, window cards, street-car cards, and billboard posters, circulars, tags, mimeographed letters, campaign buttons, or pennants should be provided by the printing committee in accordance with the plans of the advertising committee.

Such printed forms as are needed in connection with a baby health conference, a school day, or other special features, should be secured through the printing committee.

ADVERTISING.

The advertising is largely a matter of the good distribution of the printed matter and of the carrying out of a series of special features of which the local committee will undoubtedly devise more than are given here. Practically all of the advertising should be without cost to the baby-week budget except for printing. Some of the following features are suggested:

Mention of Baby Week in the advertising space of theater programs.

Two or three slides shown in every motion-picture theater; one to announce Baby Week, one to tell of the special central feature such as the exhibit or health conference, and possibly a third giving a list of the events of the week.

The following uses may be made of the printed matter listed above:

(a) Department stores, drug stores, and other large stores may be asked to include slips in all bundles sent out during Baby Week and several days preceding its opening.

(b) Automobilists and firms having delivery wagons may be asked to display pennants.

(c) School children may be given some of the literature, such as the programs and the folders, to take home to their parents.

(d) The company controlling the inside space for street-car advertising may give space for cards announcing Baby Week; if not, it

is possible some of the advertisers will either give the use of their space for a week or mention Baby Week in their own advertisements.

Letter writing can be carried out indefinitely if there are good committees to follow it up. This is especially useful if it is desired to interest people throughout a county or rural district in Baby Week. For example, the school children may be asked to write letters as composition work, in which they will tell their parents or relatives or friends in the county about Baby Week and invite them to attend. Members of various local organizations may be asked to write letters to the other branches of their organizations in near-by towns inviting them to send in delegations to celebrate Baby Week.

TALKS.

A subcommittee of the publicity committee may do a great deal of advertising of the campaign through 5 or 10 minute talks at all sorts of places where people gather. By using the directory of organizations they can probably learn of many weekly meetings where they can present the subject in a brief talk. By watching the daily papers they will note many meetings at which a speaker ready to fill in with emergency talks can appear for a few minutes.

Permission may be obtained from the managers of theaters and motion-picture theaters for good speakers to deliver short addresses between the acts or reels.

BABY-WELFARE INFORMATION.

An important part of a baby-week campaign is the gathering of accurate information with regard to the death rate of the babies in the community and the conditions especially affecting babies.

This information will be useful in the campaign in a variety of ways—for the preparation of exhibit material, for newspaper stories, for printed information to be sent to ministers preparing baby-week sermons, for speeches and talks at mass meetings and informal meetings throughout the campaign.

The committee in charge of obtaining this information should include in its membership the local health officer and registrar and other individuals who have had the opportunity of studying local conditions, and should secure the following data:

1. The baby death rate.

It has been pointed out repeatedly that one of the primary necessities in work for infant welfare is an accurate knowledge of the number of births and deaths of babies. As is well known the United States lacks such complete records. The test of birth registration carried on by many women's organizations in the country in coop-

eration with the Children's Bureau has demonstrated the great need for better laws and for the better enforcement of the existing laws. In most communities, therefore, accurate statistical data with regard to the baby death rate can not be obtained. Where this is the case, the need for better vital statistics should be emphasized throughout the campaign.¹

The facts, as far as disclosed by the records, should be studied. The following figures should be compiled:

(a) The number of live births during the last calendar year of which records are obtainable at the time of the campaign.

(b) The number of deaths of babies under 1 year of age during that year.

(c) The baby death rate, or infant mortality rate, which is the relation between the two. The rate is expressed as the number of deaths of babies under 1 year of age per 1,000 live births during the same year. In the smaller communities the number of babies born alive during a year may not reach 1,000; the rate is then obtained by reducing the ratio to terms of the number of deaths per 1,000 live births. For instance, if the number of babies born alive during the year is 200, while the number of babies under 1 year of age dying during the year is 25, the baby death rate will be 125 per 1,000.

(d) Compilation of the figures relating to the number of deaths of babies during the year from various causes; as from diarrhea and enteritis, bronchitis and pneumonia, and from diseases due to causes acting before or at birth.

A useful method of studying and portraying conditions in the community is through the preparation of two spot maps, one showing the location of the births and the other that of the deaths of the babies during the year studied. Maps for this purpose should be large and should contain very little detail. The spots should be made at the location of the address where the birth or death occurred. The spots may be drawn by hand or put on with a rubber stamp, or they may be represented by short pins with colored glass heads.

2. Data regarding all infant-welfare work being done in the community by the department of health or by private organizations, including:

(a) Infant-welfare or milk stations or other types of permanent stations.

(b) Work by visiting or public-health nurses.

(c) Educational work by pamphlets, lectures, etc.

(d) Provision for sick babies at hospitals.

(e) Prenatal care, supervision of expectant mothers, proper obstetrical and nursing care of mothers.

¹ See Birth Registration, United States Children's Bureau publication No. 2.

- (f) Summer camps or tents for babies.
- (g) Ordinances, enforcement, and work done for the prevention of blindness among babies.

3. A study of the local milk supply.

4. A study of the sanitary conditions of the community which affect the babies.

These studies may be made preparatory to Baby Week or may be included in follow-up work (see p. 43). They may form part of the program of women's organizations during the winter.

PROGRAM OF DAYS.

The feature of Baby Week that affords the best opportunity for interesting newspaper publicity and for enlisting large numbers of volunteer workers is a series of special events for each day in the week. Some of those mentioned in the following list may be suggestive.

BABY SUNDAY.

Baby Sunday may well begin the Baby Week.

The committee in charge of this part of the campaign should secure a list of the leaders of the religious bodies of the community. The members of this committee should call upon or write to each, explaining the purpose of Baby Week and asking each to preach on that subject. In order to aid in the preparation of such sermons, a copy of an outline of information on the subject of Baby Week should be furnished.

In the Appendix, page 56, will be found a copy of the letter sent by the mayor to the clergy of New York City, and on page 57 considerable material on the subject of infant welfare and Baby Week which may be incorporated in such an outline.

A letter from the mayor of the city indorsing the baby-week movement may be read from the pulpit; in the Appendix, page 56, is a copy of such a letter from the mayor of Indianapolis, used in this way during the Indianapolis Baby Week.

If the governor or State health department has issued a proclamation or a letter indorsing the setting aside of a certain week for Baby Week, this may also be read from the pulpit on this day.

Sunday schools may arrange special programs for their meetings on that day. The committee may send a request to the superintendent of each Sunday school that such a program be arranged.

Church societies of men may arrange that their meetings held during the week shall include a short discussion of the subject. The discussion should have as a leader some one with special knowledge of baby welfare. Suggestions for programs are given on page 29, Church societies of women meeting during the week may plan similar programs.

MASS MEETING OR RALLY.

A mass meeting may well form a very useful feature of Baby Week. It may be held at the beginning or end of the campaign. The committee in charge of this meeting undoubtedly will be able to secure free some public hall, theater, or school. In planning a place it is well to choose one barely large enough to accommodate the size of audience which may reasonably be expected to attend. A meeting which fills a small hall, even to overcrowding, is more inspiring than one in a large hall which is half empty.

A suitable presiding officer should be chosen. An interesting speaker from another city may be secured for this meeting; many State departments of health are able, on application, to send out speakers for meetings if the expenses of such a speaker are paid. Short talks by representative people of the community should be included. The talks at this meeting should be on subjects of general interest. Such subjects as "The purpose of Baby Week;" "What a city owes its babies;" "After Baby Week, what?" "This community's baby death rate;" "What other cities have done for their babies," might be included.

Talks on technical and medical subjects are not appropriate for this meeting. Lantern slides and motion pictures might form part of the program. Some entertainment feature, such as band or orchestra music, a children's chorus, or a short play, may be used.

Ample publicity and advertising should be given the meeting; in case the community draws from a surrounding rural population, special effort should be made to secure the presence of people from the country. Speakers from the men's and women's rural organizations should be asked to present the subject of the community's responsibility for its babies from the point of view of those living in the country.

FLAG DAY.

On this day, which may come either on the Saturday before Baby Week opens or on Monday, banners with the baby-week emblem are distributed to the homes of all the babies under 1 year of age that have been registered with the health department. These banners may be made up very cheaply of muslin with the emblem printed in appropriate colors. A good size for the banner is 18 inches long by 12 inches wide, with a stick long enough to be tacked to a window frame. In planning for the delivery of the flags it is a good thing to have the boys carry small hammers and tacks, so that they may put the pennants in place when the householders are willing. Printers and novelty makers can make these banners. The advantages of flag day are that with the banners flying from the windows the sections where

there are the most babies are made particularly aware of the fact that it is Baby Week, and also that the flags are a direct recognition of the fact that these babies have been registered. With each pennant should be delivered a program of Baby Week and a leaflet on the care of the baby. Special announcements of the infant-welfare exhibit or baby health conference, if these are held, should also be distributed. (See p. 39.)

The preparations for flag day require considerable care and plenty of time. Committees of women, assisted by committees of boys, should make the distribution. Several days in advance a central committee on flag day should receive from the health department envelopes bearing the names and addresses of the registered babies. These will then be sorted by districts and the appropriate number of flags sent out to the various headquarters from which the different teams will start out to make the canvass. All those engaged in the distribution of flags must be able to make a clear and brief explanation of Baby Week and flag day. In making up the list the health department must check the birth registration with the death registration list, so that no flags will be sent to homes where babies have died. One of the elements in making flag day a success is a generous notice of it in the press, both the day before and on the morning of flag day. If there are papers printed in foreign languages, particular care should be taken to see that an explanation of flag day is printed in the issue of the week before.

SCHOOL DAY.

On one day during the week special exercises may be held in the schools throughout the city. These may come as a regular part of the school work or be held in the afternoon as a special entertainment to which parents are invited. Some of the following features may be included in the program for this day:

1. The reading of a letter to the school children from the mayor or other official telling them how they can help to save the babies.
2. A talk by the principal or teacher on what the children can do for their baby brothers and sisters.
3. The reading of one or several compositions on "How to keep baby well," which have been selected from among the compositions written by the children in a certain room or school. It is quite likely that the newspapers will publish one or more of the best of these compositions.
4. In schools where Little Mothers' Leagues (see p. 47) are organized the program may consist of compositions and demonstrations by members of these leagues and of talks by their teachers. If no Little Mothers' Leagues are at present organized, the school day may afford an opportunity for their organization in many schools.

5. The performance of a play. (See p. 30.)

If it is desirable to have daily programs at the headquarters, some of the best programs presented in the schools may be repeated at the central headquarters later in the week.

FATHERS' DAY.

One day in the week may be devoted especially to the fathers of babies. On this day such statements as the "Message to fathers," printed in the Appendix (p. 60), or, still better, a message prepared locally should be widely distributed in whatever ways are practicable. Newspaper articles will be especially valuable.

The responsibility of the city's fathers and of all individual fathers for the welfare of the city's babies should be pointed out and emphasized by reference to the facts regarding the particular community which have been brought out in the studies described on page 23.

OUTING DAY.

If the weather permits, an outing day for mothers and babies forms an attractive feature. This may take the form of an automobile ride, a morning or an afternoon spent in the park, or an excursion on the water. If it is possible, an alternative in-door program for bad weather should be planned.

VISITING DAY.

On this day a tour of inspection of all of the places where any work is done for babies may take place. Such a day is very important in communities where infant-welfare work has been begun either by the health department or by private organizations and where it is desirable that the public shall know of the work being done and the need for further work. This will include infant-welfare stations, day nurseries, baby hospitals, and any other place where something is done for babies. City officials and representatives of men's organizations and of societies for civic and mutual benefit should be invited to take part in the tour.

BIRTH-REGISTRATION DAY.

In communities where there is a special need for better birth registration it may be well worth while to concentrate the attention for one day on the importance of registering babies' births. On this day all the physicians might be sent a letter asking their aid in securing prompt and complete birth registration for their city.

The newspapers should be furnished with incidents showing the practical value of birth registration. The general suggestion may be made that parents will do well to ascertain whether the births of their children have been duly recorded.

SPECIAL FEATURES.

INFORMAL MEETINGS.

Aside from one mass meeting or rally to be held during Baby Week it is not likely to be desirable to hold a series of formal meetings in connection with such an extensive program as has been outlined. Two reasons for this are:

First. That such meetings require considerable time and effort to plan, and most of the workers will be too busy with other features to give the meetings the attention necessary to make them successful.

Second. That probably it will be difficult to provide enough separate publicity for the meetings to advertise them sufficiently.

Informal meetings are, however, very desirable in connection with the exhibit or the health conference.

If there is no central headquarters and the city is large enough to justify the use of neighborhood committees, it may be worth while to plan for meetings in public halls or schools in all parts of the city. These meetings may be held either in the afternoon for mothers especially, or they may be evening meetings for parents. The programs may include brief talks, music, stereopticon slides, and possibly motion pictures. In such meetings also the short plays may be used.

TALKS AT CLUB AND SOCIETY MEETINGS.

A special effort may be made to have each organization which meets during the week devote part or all of the meeting to discussion or talks on subjects related to baby welfare. In communities where it has been decided that it is impossible to send out messages to individual fathers a copy of such a message may be sent to each men's organization in the community with the request that the message be read at a meeting of the organization if such occurs during the week. (See p. 60.) A similar message to women's organizations may be prepared and sent to each women's organization with the request that an informal discussion of the problems and lessons of Baby Week be included with the reading of the message. The following are a few suggested topics for discussion:

"How can this community better the conditions for the babies?"

"What can this society do to improve conditions for the babies?"

"Birth registration."

"Infant-welfare work: Infant-welfare stations, public-health or visiting nurses, and what they have done for babies in other communities."

"Rural public-health nurses."

The Children's Bureau will furnish lists of references on these subjects.

LANTERN SLIDES.

Slides illustrating the care of babies, and also different types of welfare work, may be prepared locally or may be borrowed from various sources. Many State boards of health have sets of lantern slides on appropriate subjects which they send out with or without outlines for an accompanying lecture if the cost of transportation is paid and broken slides are replaced. (See Child-Welfare Exhibits,¹ p. 49.) On page 61 of this pamphlet will be found a list of other sources from which slides may be obtained.

MOTION PICTURES.

While motion pictures are among the most popular forms of education and many communities desire to use them, unfortunately there do not seem at present to be enough films available on baby welfare, either from commercial exchanges or private organizations, to make up a list that would be useful. There are comparatively few films on subjects pertaining to baby welfare, and some of these are not easily obtainable. The Children's Bureau, on request, will give as much information as possible in relation to available motion pictures and films.

PLAYS.

Some entertainment feature, such as a short play, in which children can take part will add greatly to the interest of Baby Week. Short plays, written by the people in the community and acted by school children, have proved very successful. The play should have as its theme the health and happiness of babies. The play should probably not last more than half an hour and should be used as a feature of some other program either at the campaign center, at the exhibit, at neighborhood centers, or at the schools on school day.

In the Appendix (p. 61) are given details with regard to two plays written for the Pittsburgh Baby Week; also the names of several other short plays on other subjects which may give suggestions to those wishing to write original plays for Baby Week.

In producing the plays it is a good plan to have a number of different casts trained to act the same play. The larger number of children taking part will interest more of the parents in seeing the production; moreover, the larger number of casts will make it possible to give many more performances, as it is impracticable to have the same group of children take part every day during Baby Week.

¹ Child-Welfare Exhibits: United States Children's Bureau publication No. 14.

INFANT-WELFARE EXHIBIT.

In the general discussion of the subject of the program for Baby Week the statement has been made that in a baby-week campaign it probably is not best to make an infant-welfare exhibit a very elaborate feature, as the time and resources of workers are usually so much engaged with the other features of Baby Week that a large infant-welfare exhibit can not be made a success. A small exhibit, either borrowed or prepared locally, may, however, very well form a central feature of even a comparatively simple baby-week campaign. It may be a part of the program at a general headquarters or meeting place; it may be combined with lectures and demonstrations on the care of the baby; or it may be carried on in conjunction with a baby health conference. A committee appointed by the executive committee should be in charge of the exhibit.

Object of the exhibit.—An infant-welfare exhibit may have either of two objects—to give mothers information regarding the proper care of babies or to show the importance and need of infant-welfare work in the particular community. Sometimes both objects may be combined. It is well to decide as a first step what the object of the exhibit planned is to be. In general, when the object is primarily to teach the principles of infant care, the panels may well be borrowed from one of the traveling exhibits; when, however, the object is to show the local conditions with respect to babies, the need for infant-welfare work, and the ways such work should be carried on, the material must largely be prepared locally.

Different features which may be included in an infant-welfare exhibit are (1) wall panels, (2) exhibit of objects, and (3) demonstrations.

An exhibit on teaching infant and prenatal care may include:

1. Panels on prenatal and infant care and the care of the eyes.
2. An exhibit of articles to be used in the proper care of the baby.
3. An exhibit of articles which are harmful to the baby.
4. Demonstrations by nurses or teachers of domestic science on the preparation of milk for the baby and of food for the young child; and on dressing and bathing the baby, etc.
5. Lectures, possibly illustrated by lantern slides, on the care of the baby.

An exhibit having the object of showing the need for infant-welfare work may contain:

1. Panels dealing with the facts relating to the infant mortality rate of the community, the need for infant-welfare or milk stations, of visiting nurses to do infant-welfare and prenatal work, of better birth registration, of a better milk supply, of better sanitary conditions, etc.

2. An exhibit of the equipment necessary for an infant-welfare or milk station.

3. Demonstration of the work of an infant-welfare station.

4. Lectures (illustrated by lantern slides) on infant-welfare work.

An infant-welfare exhibit may combine the two forms of exhibit; in this case the two sections should be distinct.

Wall panels.—The many excellent traveling infant-welfare exhibits deal chiefly with the care of babies. Many State boards of health and extension departments of State universities and agricultural colleges have exhibit material which they will send out anywhere in the State to an organization paying transportation. On pages 49 to 51 of Child-Welfare Exhibits is a list of these departments and a general outline of the material available. These departments are adding rapidly to their supply of exhibit material; several also intend preparing special material for infant-welfare exhibits for Baby Week. Therefore it would be wise in all cases to make application to these State departments for exhibit material.

Several national organizations and Federal departments have traveling exhibits on the subject of infant care and welfare. For a list of these organizations and departments, and for details regarding their exhibit material, see Appendix, page 61.

If no exhibit material on the care of infants in the form of wall panels is found to be available, the exhibit committee may wish to prepare their own panels. The subject matter for these panels may be obtained from one of the pamphlets published by State boards of health on the care of the baby. Reproductions of a few typical panels on the care of babies are given in the Appendix of Child-Welfare Exhibits. In the Appendix of this bulletin, page 62, are given lists of the subjects of the panels in several infant-welfare exhibits. In preparing panels it is well to remember that it is best not to attempt to include too much on one panel and that each panel should be on one subject or idea and should not be a miscellaneous collection of statements and pictures.

Preparation of panels.—A small temporary exhibit may be made at rather small expense, if cheap materials are used. In a temporary exhibit there is no need of providing frames for the panels. Unframed panels, however, should have a border painted in a color contrasting with that of the panel. A good size for a large panel is 3 by 5 feet, the panel being hung 20 to 30 inches off the floor.

The material of which panels may be made will vary somewhat with the size. In addition, panels which are to have photographs pasted upon them need a stiffer ground than when these are not used. For larger panels the materials most generally available are beaver board, Upson board, and compo board. For smaller panels corru-

gated strawboard, heavy cardboard, and binder's board may be used. The last two are usually easily obtainable in all communities.

Lettering.—Plain upright letters are best, varying in height from three-fourths of an inch to 2 to 3 inches for special display. The sloping italics favored by sign writers are very difficult to read. The type of lettering known as gothic is very clear and easily read. Lettering may be done on some gray backgrounds, in both white and black letters. A color variation for important words or to lend variety is desirable when used in moderation. It is well to remember that the cheap red which produces a glare is ineffective.

Lettering is best done by a sign painter if this expense can be incurred. The best substitute method is the use of pasted paper letters. These paper letters, having gummed backs, may be ordered at stationery shops.

In using these the signs should be designed by a person with a sense of artistic balance and then pasted with great care.

Illustrations.—Panels are much more attractive and interesting if they are illustrated by photographs, drawings, colored pictures, or maps. It is well, however, to avoid the use of diagrams and charts that require close study. Photographs should be enlarged to at least 10 by 12 inches to be effective.

Exhibit of objects.—1. A very interesting part of an infant-welfare exhibit is a collection of model articles for use in the care of the baby. These may be borrowed from the stores, but should be carefully chosen by the committee. The exhibit may show outfits at minimum cost and homemade substitutes, as well as good ideas for standard use.

The exhibit may include proper clothing, sleeping and bathing arrangements, articles used in the modification of milk and preparation of food for older children. (See Appendix, p. 64, for a list of articles forming part of the exhibit on infant care at the exhibit of the Children's Bureau, Panama-Pacific Exposition, and for other articles which may be used.)

2. Objects which are injurious to the baby may be shown, such as pacifiers, long-tubed nursing bottles, etc.

3. A model infant-welfare station may form part of the exhibit.

4. An exhibit of proper foods for babies over 1 year old.

5. Homes of the Do Care and Don't Care families. (See Appendix, p. 64.)

Lectures.—Short lectures on the care of the baby and on infant-welfare work may be given by physicians or nurses. These may be illustrated by lantern slides. (See p. 30.)

Demonstrations, accompanied by short talks by physicians, nurses, or teachers of domestic science, form an extremely interesting accom-

paniment to an exhibit. Demonstrations on the care of the baby may consist of:

Preparation of modified milk.

Preparation of food for older babies, 1 to 6 years.

Bathing the baby.

Dressing the baby, showing proper costume in summer and winter.

Protection from flies, etc.

Demonstrations of infant-welfare work may show the work of an infant-welfare or milk station and of public-health nurses.

Explainers.—Explainers, whose task is to draw in visitors to the exhibit as well as to explain its details, are extremely important for any exhibit. (See Child-Welfare Exhibits, p. 42.) They are especially important for a small infant-welfare exhibit. Arrangements should be made to have at least one explainer continually at each section of the exhibit. All explainers should receive instruction in the subject matter of the exhibit from a representative of the committee which has arranged it; meetings of the explainers once or twice during the week, at which they may ask advice with regard to questions which have puzzled them, may be of advantage.

Nurses as explainers are especially desirable, particularly if the exhibit is one largely on the care of babies. Besides explaining the panels they may give demonstrations in the preparation of milk, in bathing the baby, etc. It is well to have one or more nurses present as explainers at each session of the exhibit. Their help may be obtained through the local infant-welfare society, the local visiting-nurse association, or the local hospitals. At the Pittsburgh Baby Week the cooperation of the hospitals did much to make the exhibit a success. The chairman of the explainers' committee invited the superintendents of the leading hospitals to serve on her committee. Each of the superintendents took the responsibility of providing nurses as explainers for one or more sessions. The nurses came in uniform, and 10 to 12 of them were present continuously. The nurses themselves felt that the experience was a valuable one in many ways.

Publicity.—It is extremely important that the exhibit should be given proper publicity. The publicity committee of the Baby Week will have this in charge (see p. 20), but the exhibit committee will have to see that correct information with regard to the exhibit is furnished to the committee on publicity.

Extremely important is the effort to secure the attendance of the particular people to interest whom the exhibit has been designed; for instance, if an exhibit on the care of infants has been prepared, an especial effort must be made to bring to the exhibit the mothers of the community; if one on the need for infant-welfare work has been arranged, those organizations and individuals who will be use-

ful and influential in helping such a movement should, if possible, be brought to the exhibit. Different methods must be devised in order to reach different types of people. In Pittsburgh many mothers were reached through their children in school. Personally conducted parties were organized in different neighborhoods and taken to the exhibit.

Additional information which will be useful to those planning an exhibit may be obtained from Child-Welfare Exhibits, Children's Bureau publication No. 14; A B C's of Exhibit Making, Department of Surveys and Exhibits, Russell Sage Foundation (in preparation); Report of the Philadelphia Baby-saving Show, Child Federation, Weightman Building, Philadelphia, Pa.

BABY HEALTH CONFERENCES.

"Living features"—that is, features in which grown people, children, or babies take part—are the most interesting divisions of any exhibit or celebration. In the baby-week campaign much of the work is necessarily of this character. The committees are centers of activity and arrange the many features which have been suggested in this bulletin—celebrations by school children, parades, outings, etc.

The whole campaign, however, revolves about the baby himself; he is its most interesting feature. Various types of what may in general be called baby health conferences have been devised; all have one common aim—to focus attention on the individual baby. There is a growing tendency to minimize the competitive element in these events and to make the conference of assistance to the mothers of the baby examined by pointing out the needs of each baby and the ways by which his physical condition may be bettered.

The conference, moreover, is a valuable demonstration to all the people of a community of the value of a periodic physical examination for all babies as well as for older children and of guidance to mothers in the care of their babies. The conference may therefore be a potent means of showing to a community how such examinations may be carried on and the benefits of such work in "keeping the well baby well." The organization of infant-welfare or milk stations or other forms of permanent stations often follows the holding of such conferences.

A conference is best combined with a small infant-welfare exhibit. Held in conjunction with an exhibit on the care of babies, it shows the practical application of the advice given on the panels, while if the exhibit deals with the need of the community for infant-welfare or milk stations, the conference illustrates the methods and benefits of such work.

All the different forms of conferences to be described have in common the following features: Thorough physical examination of the

babies by competent physicians according to some definitely outlined plan, a record of the examination being given to the parents; personal interviews between physicians and parents, in which the needs of the baby are pointed out and the general hygiene best suited to the baby under consideration is dwelt upon. No treatment or prescriptions are given; where there is need for either, reference is made to the family physician or dentist, to specialists, or, where the parents can not afford private care, to clinics and hospitals. The information with regard to the proper care of the baby given to the mother is much strengthened by reference to the exhibit material of the infant-welfare exhibit, by demonstrations and lectures (with lantern slides) on the subject, and by the giving out of bulletins and leaflets. The help of nurses is an important feature. Conditions for the conference which are safe and comfortable for the baby must be provided.

The following suggestions for the organization, equipment, and arrangement of a baby health conference of any type held during Baby Week are adapted from methods used in many successful conferences. The pamphlet¹ of the American Medical Association on Baby Health Conferences has been of great assistance in drawing up this outline. Different communities may develop modifications of detail in accordance with local conditions. The Children's Bureau will be glad to receive reports of any important modifications which prove successful.

Organization of conference.—The conference should be in charge of a special committee—the baby health conference committee.

The duties of this committee will be to secure a suitable place for holding the conference, provide equipment and record sheets, make appointments, cooperate with the medical staff, secure the help of nurses, procure educational literature for distribution, and superintend the carrying on of the conference. These duties may be apportioned among members of the committee or may be delegated to subcommittees, such as subcommittees on arrangements and equipment, on appointments or registration, on educational literature, etc. Certain work, such as publicity, printing, etc., naturally will be delegated, after consultation, by the committee to those committees of the baby-week campaign in charge of publicity, printing, etc.

In some communities the baby health conference committee may desire the help of some one who has had experience in organizing these events. Application may be made to the State board of health and to the extension departments of the State university and of the agricultural college. In many States one or more of these departments are able to recommend people for this service.

Medical staff.—The cooperation and interest of the local medical society, city or county, should be sought. The president of this so-

¹ Pamphlet No. 5, for use in baby health conferences, American Medical Association.

ciety may be consulted in the selection of the medical staff of the conference, consisting of the physicians to carry on the examinations and substitutes to take their places in case of need. Physicians specializing or particularly interested in children's diseases who have had experience in giving advice to mothers with regard to the hygiene of infancy and young childhood should be selected. Specialists to make the mental examinations and the examinations of the teeth and of the nose and throat will be necessary in certain forms of conferences. Where these are needed they should be selected after conference with the presidents of the local dental society and medical society.

Nurses.—The help of nurses in carrying on the conference is very desirable. Nurses will be needed to assist the physicians and to weigh and measure the babies; a nurse should be in constant attendance in the dressing room.

Place.—Any large central meeting place having sufficient accommodation may be used; the use of rooms for this purpose should be obtained free. Rooms in a public school are most satisfactory, but except during the vacation period may not be available. Clubrooms or rooms in the courthouse are often available. An empty house or store may be used. An infant-welfare station may be used in cities where these exist. The following rooms are desirable:

Examination rooms.—A large room with space for examinations of two children at one time may be satisfactory. Where many children are examined, or examinations by specialists are made, several rooms for examination are necessary.

Spectators will be extremely interested in watching the conference. It is also often desirable that they should be admitted, one of the objects to be attained by the conference being the demonstration to the public of the methods and benefits of a periodic physical examination of babies, such as that carried out. On the other hand, a private conference is more valuable for the mother and safer for the baby. Therefore, for the safety of the babies and comfort of mothers and examiners, the spectators, if admitted, must be separated from the space used for examination. When no adequate provision can be made for this, it is probably best to exclude spectators. The arrangement which was used in the children's health conferences held in Knoxville and at the Panama-Pacific Exposition was an examination booth, with walls composed largely of glass. This arrangement, however, is too expensive to be used in most conferences. A door fitted with a panel of glass may be placed in the doorway of the rooms used for examinations. Other methods of separating spectators from the examining space may be devised.

If any mother objects to a public examination of her baby a screen should be placed around the table.

A lavatory or substitute is necessary in the examining rooms, as the physicians will wish to wash their hands before examining each baby.

A *waiting room* for mothers where the babies are undressed is desirable. If possible, this should be equipped with a toilet room.

Adequate arrangements must be made for proper ventilation and lighting, and for keeping all rooms warm enough to allow for the fact that the babies are kept undressed for some time.

Equipment.—Most of the equipment can be borrowed or made by the members of the committee. The following are required for the examining rooms:

1. Two or more tables for the examination of babies, the number depending upon the number of physicians carrying on the examinations. A kitchen table covered with a folded blanket, then with rubber sheeting, and over this a clean sheet is suitable. A clean towel or napkin is spread over the sheet and changed after each examination is made.

2. Table for scales.

3. Accurate scales which have been tested; preferably a scale with a platform and a beam balance. A suitable pan or basket, which can stand on the platform, should be provided for holding the baby. A clean towel or napkin should be placed in the scales before each baby is weighed.

4. Four or five linen tape measures; a measuring board, which is very convenient for measuring babies, is described in Pamphlet No. 5 of the American Medical Association.

5. Calipers or pelvimeter.

6. Supply of sheets, baby blankets, towels, etc.

7. Paper towels, soap, bichloride tablets, provision for boiling instruments, etc.

8. Electric flash light.

9. Box of wooden tongue depressors.

10. Stethoscopes.

11. Toys to amuse frightened children. On account of the possible spread of contagion from one child to another through toys, it is advisable, if possible, to provide a new, inexpensive, unpainted toy for each child examined. These may be donated; otherwise they would add somewhat to the expense of the conference. If the same toys are used they should be washed after each use.

12. Flesh pencil for measurements.

13. One or more screens.

14. Objects needed for mental tests.

For the waiting or dressing room, plenty of chairs and tables and a supply of paper hat bags.

Record sheets.—These will vary according to the different types of conference. (See below.)

Time.—The conference should be held during the morning or early afternoon, never in the evening.

Publicity.—The committee should confer with those committees of the baby-week campaign in charge of newspaper and advertising publicity, so that as great publicity as possible may be given the conference.

Accounts of the purpose and organization of the conference should be included in all the newspaper stories published for several weeks before the Baby Week begins. Information about the conference should also be widely distributed in all the other ways which are being used—by posters, signs, leaflets, etc. The conference may be announced on baby Sunday and at meetings of various organizations.

Means should be devised of making known the conference to the mothers of young babies in the community some weeks before Baby Week, in order to insure the making of appointments. The following are a few methods which may be adopted:

The names of all babies whose births have been registered during the past two or three years may be obtained from the local registrar, and leaflets or cards announcing the conference may be sent to the mothers of these babies.

The mothers may be reached through the school children. This plan was carried out in Pittsburgh. Announcements may be made in the schools or leaflets may be distributed among school children, with the request that they deliver them to parents or neighbors.

If flag day is included in the baby-week program, leaflets announcing the conference may be distributed with the flags.

Registration and appointments.—The examination of children should be by appointment only. The making of appointments should be in charge of one member of the committee or of a sub-committee. The name, address, and telephone number of the person in charge of this matter should be made known in all the advance publicity material. Appointments are made for a certain hour and a card is given or sent to the mother with the name of the baby and a memorandum of the day and hour of the appointment. It is well to include on this card a request that the mother should bring a baby blanket with her, and that she shall not bring the baby to the conference if he is ill in any way on the day appointed, or if there is contagious disease in the home. If young babies are admitted to the conference a warning may also be included not to bring out such a baby in very bad weather.

In planning the appointments ample time should be allowed for each examination. Twenty minutes is the minimum to be allowed, 30 minutes is preferable. The number of appointments to be made

will vary with the number of physicians examining the babies and the hours in which they work.

Age limits of the conference.—These will be decided by the committee and will depend upon the conditions under which the conference is held. In a small conference, where the babies can be protected in every way from exposure to cold or to infectious disease, young babies of any age may be admitted. It is especially desirable to reach the mothers of young babies. Where the above conditions are not fulfilled, it is better to make the lower age limit 6 months or even 1 year. The upper limit may be 3, 4, or 5 years, according to the conditions.

Procedure.—The details of procedure will vary according to the type of the conference. The following general suggestions may be given:

Several members of the committee should be in constant attendance at the conference. They or a subcommittee on examiners and assistants should be responsible for the presence of the physicians to make the examinations, of the nurses, and other assistants.

The nurse in the dressing room receives the mothers bringing their babies for examination and should be careful to exclude any baby with a cold, rash, red or sore eyes, cough, or any other evidence of a communicable disease. The mother is given a numbered tag; the baby's clothes when removed are placed in a milliner's paper bag numbered with the same number.

VARIOUS TYPES OF CONFERENCES.

The above suggestions may be found useful in carrying on any baby health conference. The following deals with three different types of conference which have been developed.

Baby health conference without score card.—This type of conference has been held as part of a children's health conference at Knoxville, Atlanta, Jacksonville, Toledo, Peoria, and during the past year at the exhibit of the Children's Bureau at the Panama-Pacific Exposition. (See Child-Welfare Exhibits, p. 14.)

In these conferences a full physical examination, including one of the teeth, nose, and throat, is made of each baby; a printed blank is filled out, giving a record of the results of the examination and notes with regard to the individual needs of each baby. This record sheet is given to the mothers. If treatment or medicine is needed the mother is referred, as above stated, to her private physician, to a specialist, or to other sources of help, as the case requires. No score card is used.

The record sheet used in these conferences gives space for notes on the age, height, weight, previous history, and any physical defects found in a thorough physical examination. It has a page on which

the examining physician gives advice to the mother on the general hygiene necessary to better the physical condition of the baby or to keep the baby well. In a conference of this type no attempt is made to compare the development or condition of different babies; the object of the conference is rather to center the attention of the mother on the qualities and needs of her own child; to teach in a practical way the facts with regard to the care of babies; and to point out the sources of assistance in making or keeping the baby well. These purposes should be made plain in the publicity material given out.

The organization or management of such a conference may in general be that already given.

The number of babies to be examined and the number of physicians to be asked to serve as examiners will be decided by the committee. In general a small conference, with not more than two physicians making examinations, will answer best the purposes of the conference. In this type of conference one physician makes the whole examination, referring the mother for treatment or further examination of the baby to the family physician or specialist.

The record sheets should be provided by the committee on printing of the baby-week campaign. Any simple form which is decided upon by the medical staff and which gives space for notes on the physical condition of the child and advice on hygiene may be used. Appendix 2, Child-Welfare Exhibits, page 52, shows a copy of the record sheet used in the children's health conference carried on by the Children's Bureau at the Panama-Pacific Exposition. The cover of the record sheet may have a statement of the purpose of the conference. An ornamental seal or picture will add to the attractiveness of the record as a permanent possession of the mother.

Duplicate record sheets for the physician should be provided and filled out for each baby. These are to be retained by the physician as a record of the examination. The information on these record sheets should afterwards be entered upon large summary record sheets, each column of which corresponds to one heading on the mother's record sheet.

The obtaining of these records will be an interesting part of the work of the conference; the conclusions to be drawn after the records have been tabulated will furnish an interesting paper for local medical meetings.

Tables giving the average height, weight, and measurements of babies of various ages will be desirable for the use of the examining physicians, in order to form an estimate of the development of each baby examined. Such a table has been published by the American Medical Association. A number of copies, at least five or six, should be obtained for the use of the examining physicians.

Baby health conference with score card.—In such a conference the physical condition of the baby examined is recorded on a score card. For each defect found a certain amount is deducted from the perfect score of 100. When the examination is finished and the score computed, the latter expresses the general physical condition and development of the child. Many successful conferences have been held throughout the country during the past few years according to this method. The American Medical Association has prepared a standard score card which may be obtained for use at baby health conferences. This organization has also prepared a pamphlet giving instructions for organizations wishing to conduct a baby health conference according to this score card, suggestions on the use of the score card to physicians making the examinations, and suggestions upon the computation of the score. (See Appendix, p. 56.) Sample copies and a price list of score card, pamphlet, and anthropometric table may be obtained on application to the secretary, council on health and public instruction, American Medical Association, 535 North Dearborn Street, Chicago, Ill.

Baby-improvement contests.—Another form of baby health conference is that in which the babies are first examined and scored as in the above conference, and after an interval (1 to 12 months) are again examined and scored and a diploma, medal, or prize is given to the babies showing the greatest improvement in score. The following resolutions were adopted by the council on health and public instruction of the American Medical Association February 24, 1914:

That if the awarding of any medals or prizes seems judicious in the baby health conferences, they shall be given to the babies showing the greatest improvement in health between the various examinations rather than to the naturally healthy child who scores high at the first examination.

A baby-improvement contest was held by the Child Federation of Philadelphia in 1914. In this contest the babies examined and scored at the first examinations were kept under observation for four weeks and their homes were visited at frequent intervals by trained nurses. At the end of this time the baby was again examined and scored. The final score, upon which prizes were awarded, was based 50 per cent on the improvement shown in the physical condition of the baby between the two examinations and 50 per cent on the improvement shown in the cleanliness and general sanitation of the home, the care of the baby in the home, and the degree of cooperation shown by the mother. All babies were examined by appointment. At the close of the first examination the physician prepared a slip containing the special form of instruction he desired the mother to have, and this was given to the visiting nurse having the case in charge. Many organizations have held a baby health conference according to a score card and a year later have held an improvement contest, the

same babies being entered for a second examination. In Pittsburgh the first examination in a baby-improvement contest was a feature of Baby Week.

FOLLOW-UP WORK.

Just as important as the campaign of Baby Week is the "follow-up" campaign which should succeed it. One of the two main objects of a Baby Week as sketched in the preceding section is to bring before the public a realization of the facts relating to the baby deaths in the community and the need of greater efforts on the part of the community to protect its babies. If this has been successful, at the end of the Baby Week the time will be ripe for the urging of specific programs for the welfare of babies.

In the section on "Organizing Baby Week" the statement was made that, before dissolving, the executive committee of the baby-week campaign should appoint a committee to make plans for follow-up work. The local department of health should be represented on this committee.

The work will vary greatly according to the conditions of the community and according to the amount of work for the welfare of babies already being carried on. In communities where the city health departments are already carrying on good medical and nursing work for mothers and babies, where the milk supply is properly safeguarded, where birth registration is prompt and complete, the follow-up work will naturally develop general interest in giving these public activities continued intelligent support and will direct attention to the need of studying the city's responsibility for bettering sanitation, housing, and industrial conditions. In cities where private organizations are carrying on infant-welfare work, but where little money is allowed the city departments for this purpose, a follow-up publicity campaign may help in obtaining such popular support that these departments can take up this work. The follow-up work here will also help private organizations. The stimulation of better cooperation between all agencies interested in infant welfare should be one of the important results of Baby Week.

Many communities have as yet no work, public or private, for the welfare of babies; here the follow-up campaign will be directed toward beginning some work of this kind according to the local needs.

INFANT-WELFARE STATIONS.

These stations have proved their great value for infant welfare. The Children's Bureau has information regarding 534 stations maintained, at least during the summer months, in 1915, in 141 cities in the United States having a population of 10,000 and over in 1910. In 33 of these cities the work is carried on by the health department,

in 21 by the department in cooperation with private organizations, and in the remainder by private organizations. There is an increasing tendency for health departments to take over the work.

To infant-welfare stations the mothers bring their babies at least once a week. A physician sees the baby, advises the mother about the feeding, and urges her to nurse the baby if possible. Through such advice many mothers are able to nurse their babies who otherwise would wean them. If nursing is impossible, the doctor advises the mother how the bottle feeding shall be prepared. The doctor and the nurse tell her of the methods by which she can keep her baby well throughout the hot summer weather. The nurse then visits her in her home and shows her how to carry out the doctor's instructions.

Very often pure milk is sold at these stations. Experience has proved, however, that this is not necessary for the success of the work.

Prenatal care, or the care and instruction of women before confinement, in many cases is carried on through the stations. This work has lately increased rapidly. We have records at present of prenatal work being carried on in 183 different localities.

The Public Health Commission of New York State in 1913 recommended that "each city with a population in excess of 10,000 and having an industrial population should have one infant-welfare station, and larger cities with an industrial population should have one such station for approximately each 20,000 inhabitants."

The work of a committee or organization planning to begin infant-welfare work, after the task of gathering funds to carry on the work has been accomplished, is thus outlined by the director of the division of child hygiene, New York State Department of Health:¹

A committee on welfare stations should select the location of the station after careful study of local conditions. It should appoint a medical director and secure the services of an experienced infant-welfare nurse. The responsibility for the equipment and maintenance of this station lies with this committee, and the station should be under its careful personal oversight while in operation

STAFF.

A medical director is appointed to have direct charge of the work. The staff should consist of at least one nurse for each station, and if necessary several volunteer physicians, who have charge of the weekly clinics.

LOCATION.

The station should be opened near the center of the district which it is to serve. A study of the location of infant deaths in a city will show where a station should be placed. Rent may be saved if the cooperation of a settlement

¹ Infant Welfare Campaigns and Infant Welfare Stations, New York Department of Health, Supplement to Health News for April, 1914.

house can be secured and the station installed there, as was done in Albany. In Syracuse, Rochester, Little Falls, and several other cities rooms in the public schools have been utilized during the summer vacation for this purpose. Where such plans are not practicable for housing the station the renting of a store is necessary, as has been the case in several cities, notably Yonkers and Schenectady.

SIZE OF STATION.

Two rooms at least are necessary for the station. One should be a fairly large milk-dispensing room, suitable for holding classes for mothers. Camp chairs are excellent for use here, as, when the class is over, they may be folded up and put aside, allowing free use of the floor space. A smaller room at the rear of the dispensing room will serve for a consultation and weighing room. In this the doctor in charge and the nurse examine and weigh the babies at the weekly clinic. This room should be supplied with running water and with arrangements for heating water, and a toilet, etc. The consultation room may also be utilized for demonstrating to mothers methods for the modification of milk.

EQUIPMENT

For the dispensing room, the principal equipment required is an ice box (one in which the milk bottles can be placed in direct contact with the ice is preferable to one where the ice is kept in a separate compartment), a table for the nurse, and sufficient chairs for nurse and mothers. If classes are held, a number of folding camp chairs will be necessary. The consultation room contains the doctor's desk or table, a table for weighing scales, a cabinet for supplies and for the utensils used in bathing the baby. Suitable record blanks for the registration of the babies and mothers are needed. These should show the gain or loss in weight, the condition of the baby, the milk prescribed, the dates of attendance, etc.

DISPENSING OF MILK.

Milk is bought by the station management and sold to the mothers. In stations where certified milk is used the market price is usually prohibitive, so that it must be sold at less than cost. Milk not certified but of good grade is dispensed in many stations, and in cities where there is an efficient system of milk inspection this milk attains a high standard. Where there are many stations the method employed by the New York City Health Department for dispensing the milk may be employed. There a milk of approved quality is sold for the dealer in each station at a fixed price by matrons who are responsible to him for the daily receipts.

Proper instructions should be given for the scalding or pasteurization of the milk, since no milk, unless certified or of the highest grade, should ever be given to infants raw.

MANAGEMENT OF STATION.

The nurse should be in attendance at the station from about 8 a. m. to 12 noon, for the purpose of instructing mothers and distributing milk. In large stations a matron should be employed to dispense the milk, so that the nurse may have more time to devote to her other duties. Mothers are given advice in these morning hours, and on clinic days the babies are weighed and new babies examined by the physician in charge. In the afternoon the nurse visits the mothers in their homes, teaching them to modify the milk if necessary. The use of dirty bottles or utensils renders the purest milk unfit for the baby.

VISITING NURSES.

The visiting nurse is perhaps the most important factor in the work of the infant-welfare station. The first step in establishing a station should be to procure the services of an experienced nurse. Under the present public-health law of New York State the health officer has power to employ public-health nurses for the reduction of infant mortality:

"Sec. 32-c. *Public-health nurses*.—Each health officer or other official exercising similar duties, by whatever official designation he may be known, shall have power to employ such number of public-health nurses as in his judgment may be necessary within the limits of the appropriation made therefor by the city, town, or village. They shall work under the direction of the health officer and may be assigned by him to the reduction of infant mortality, the examination or visitation of school children or children excluded from school, the discovery or visitation of cases of tuberculosis, the visitation of the sick who may be unable otherwise to secure adequate care, the instruction of members of households in which there is a sick person, or to such other duties as may seem to him appropriate."

The nurse should be supplied with daily or weekly reports of births in the community by the local registrar or health officer. She should at once communicate with the attending physician and offer her services, or if no physician is in attendance should visit the home and instruct the mother in the care of the baby. She should also ascertain whether a nitrate of silver solution has been dropped in the infant's eyes after birth to prevent any infection.

MEDICAL ADVICE.

The physician in charge of the station holds at least one clinic a week, when babies are weighed and new babies are examined. Sick babies are referred by him to the family physician or to a hospital or dispensary, and the mothers of sick babies are instructed in their proper care. When the baby is too ill to be brought to the station the doctor visits with the nurse and takes charge of the case if the family can not afford to pay for the services of a private physician. Mothers should always be referred first to their own physicians and encouraged to go to them. The services of the nurse should be free to all the physicians of the community when they have sick babies which need such care.

LITERATURE FOR DISTRIBUTION.

Leaflets on the care of milk and on the care of the baby are given to the mothers at many stations.

COST OF OPERATION.

The monthly cost of operating the welfare stations depends on many conditions. The principal expenses are:

1. Salary of nurses and matrons.
2. Rent of station.
3. Equipment.
4. Supplies (bottles, ice, printing, etc.).
5. Loss on sale of milk (if sold at less than cost).

In many cities the use of public schools during the summer solves the rent problem. In others, rooms in settlements and church houses may be secured free of charge. The equipment of a new station is often donated or paid for by special subscription.

Some communities may not find it practicable at first to support stations of this type. Less expensive forms of stations are the two described in Child-Welfare Exhibits, page 18. Additional information regarding infant-welfare stations may be obtained in many States from the State departments of health. The publications of the American Association for Study and Prevention of Infant Mortality, 1211 Cathedral Street, Baltimore, Md., will be of assistance. A bulletin to be published by the United States Children's Bureau will give details with regard to this work.

PUBLIC-HEALTH OR VISITING NURSES.

In many communities neither form of infant-welfare station is practicable. Here the greatest good for the babies, for the older children, and for everyone in the community can be obtained from visiting or public-health nurses. Such nurses, besides the instruction and help of mothers with young babies, also may carry on prenatal work, work for the prevention of tuberculosis, work in the schools, the organization of Little Mothers' and Junior Health Leagues, and the care of the sick in their homes under the direction of their private physicians. In many communities the follow-up work of Baby Week may be the organization of an association to support such a nurse. Such associations may obtain much information with regard to organization and cost of maintenance from the Red Cross Town and Country Nursing Service, 1624 H Street, Washington, D. C. This society will recommend nurses who have special training in nursing work in small towns and rural communities and will affiliate with local organizations carrying on this work. The National Organization for Public Health Nursing, 25 West Forty-Fifth Street, New York City, will also cooperate in any way in helping local organizations to plan visiting-nurse services and in securing visiting nurses or public-health nurses. The Public Health Nurse Quarterly, published by the National Organization for Public Health Nursing, 612 St. Clair Avenue, Cleveland, Ohio, gives information with regard to the problems and activities of public-health nursing.

INSTRUCTION OF GIRLS IN THE CARE OF THE BABY.

In some cities such instruction is given as a regular part of the school work; in others it frequently takes the form of Little Mothers' Leagues, which are self-governing organizations of the girls of the higher grades in the schools. The girls are given lectures and demonstrations by physicians, nurses, or teachers. On joining they receive a certificate and often a badge or button. In at least 97 cities some instruction of this kind is reported. Further information with regard to this work may be obtained from the Children's Bureau, the divi-

sions of child hygiene of the New York and Kansas State Departments of Health, and from the Child Federation, Weightman Building, Philadelphia.

Several organizations of women living in the country have been formed with the object of studying the problems of the care and protection of babies and children. Much may be hoped from such clubs. In time many of these may be able to employ nurses. New Zealand¹ has developed a successful type of rural health work for mothers and infants which affords suggestions for American communities.

SUGGESTIONS FOR BABY-WEEK CAMPAIGN NO. 2.

The fact that a community does not feel ready at a certain time to carry out a somewhat elaborate baby-week campaign such as that suggested in the foregoing pages need not prevent its taking part in a general or nation-wide Baby Week. Every community, including those in the country, may carry out at very little cost a simple Baby Week which will yet accomplish great good for its babies. This may be done by choosing from the various activities before described those which may be easily and cheaply carried out, and by devising others of this sort. Many communities may find it unwise perhaps to devote an entire week to the campaign; every community could give one or two days. Such a short campaign may include baby Sunday, with one day devoted to exercises in the public schools, informal meetings, and a rally. For a community wishing to give a week to the campaign but to carry it on very simply the following program might be outlined:

1. A campaign of newspaper publicity.
2. Collection of baby-welfare information.
3. Baby Sunday.
4. A mass meeting.
5. Celebration in the schools.
6. Message to women's societies.
7. Message to fathers.
8. Follow-up work of the campaign.

The activities may be divided, if it seems best, into separate days, such as school day, fathers' day, women's-society day; other days may be added or the above activities may be spread over the entire week.

Some communities may wish to include, in addition to the above program, one or more other features, such as an infant-welfare exhibit, a baby health conference, etc. Any single feature may be chosen from the more comprehensive baby-week campaigns previously outlined.

¹ See New Zealand Society for the Health of Women and Children, United States Children's Bureau publication No. 7.

In carrying out a program such as the above the sections of this bulletin dealing with each feature (such as newspaper publicity, p. 20, "Baby Sunday," p. 25, etc.) may be consulted.

The following additional suggestions may be useful to those carrying on a baby-week campaign in small towns and rural districts:

ORGANIZATION.

It has already been stated that to be successful the campaign should be a community celebration; that the help and cooperation of all organizations and interests in the community should be gained.

The suggestion for the organization of the more complete baby-week campaign given on pages 13 to 18 may be followed in a general way but in a greatly simplified form.

Any organization may initiate the movement for Baby Week. Such an organization, after reaching a decision to begin the movement, should appoint a committee to draw up a list of organizations which should be asked to cooperate and to call these to a meeting for organization. On page 13 are given suggestions as to the organizations which in a town of average size should be included. In rural communities the campaign may be one either of the county as a whole, or of a small town with the country district surrounding it, of a township, or of a single neighborhood or school. In other words, any group of people living in the country may organize to hold a Baby Week. In a county campaign the efforts should be made to obtain, in addition to the above-mentioned organizations in the county seat, also the help and interest of all of the county officials, the farmers' organizations, all teachers of the rural schools, and all organizations of rural women and the rural churches. The following committees will probably be necessary: A general or honorary committee composed of representatives from the various cooperating organizations, a small executive committee, and subcommittees on publicity, baby Sunday, school celebration, women's societies, baby-welfare information. In small rural districts the organization may, of course, be still much simpler than this. Here one committee may be in complete charge, or each subcommittee named above may be represented by only one or two people. As the expenses of the campaign, if any, will be small, the task of gathering funds for the campaign may be left to the executive committee. The subjects following are treated more in detail in the preceding pages and will be found under similar headings in the table of contents.

NEWSPAPER PUBLICITY.

Each issue of each newspaper may contain stories about Baby Week, articles on the care of the baby, especially in summer, on the milk supply, and on conditions affecting babies in that community.

On application the Children's Bureau will furnish press bulletins on Baby Week and on the care of the baby in summer. The press service of many State boards of health will furnish material to local newspapers. Newspaper syndicates, syndicates sending out material in matrix form, and "ready-print" companies may have material with definite release dates on these subjects which they are ready to furnish to editors. Where only weekly or semiweekly papers are issued, the newspaper publicity may begin in advance of Baby Week, as may be determined after conference with the editor. Newspapers published at the county seat or at the largest near-by city are likely to be interested in giving the news regarding baby-week plans in all near-by country neighborhoods and rural schools.

BABY-WELFARE INFORMATION.

A special effort should be made that the figures given on page 23 should be compiled for the community.

BABY SUNDAY.

In addition to sermons on infant welfare in the churches, meetings in Sunday schools and of men's and women's church societies may be held.

MASS MEETINGS OR RALLIES.

If the campaign is a county affair, it may be wise to hold several meetings in different parts of the county.

SCHOOL CELEBRATION.

This may be the most important part of such a campaign. At this meeting parents, principals, teachers, nurses, or physicians may give short talks on the subject of the baby; children may read compositions; Little Mothers' Leagues may give demonstrations. An effort may be made in rural communities to have such celebrations in the schools combined with meetings of the mothers of the children who are invited to the meetings. The school celebration may be held in the early evening and mothers and fathers invited. The message to fathers and that to mothers, which have been prepared by the committee, may be read here. Such meetings may take the place of rallies.

MESSAGE TO WOMEN'S SOCIETIES.

All women's societies which hold meetings during the week should be asked to give time to the consideration of Baby Week. A message to women's societies, which has been prepared by the committee, dwelling on the important place that women's organizations have in all work for the protection of babies, should be sent with the request

that it should be read at the meeting. Informal discussions may be held.

MESSAGE TO FATHERS.

An especial effort may be made to bring home to the fathers of the community their place in protecting its babies. This may take the form of a request—similar to that sent to the women's societies—sent to all organizations of men meeting during the week, accompanied by a "Message to fathers." Informal discussions and talks may be planned.

FOLLOW-UP WORK.

The follow-up work of baby-week campaigns is treated on page 43. Especial consideration is given on page 47 to such follow-up campaigns in the smaller communities.

REPORTS ON BABY-WEEK CAMPAIGNS.

The Children's Bureau is very anxious to obtain information with regard to the baby-week campaigns carried on throughout the country. It therefore requests each baby-week committee at the close of a campaign to send to the bureau as complete an account as possible of the campaign. In drawing up the account the following outline may be useful:

1. Name of city.
2. Organizations cooperating in the campaign.
3. Number of people on all the committees.
4. Outline of week's program.
5. Total expense.
6. Newspaper publicity.
7. Was a baby health conference held? Number of babies examined?
8. Was an infant-welfare exhibit held? Rented? Borrowed? Constructed?
9. Number of meetings and talks.
10. Were plays used? Titles? Number of times given? Plays written locally?
11. Special features.
12. Follow-up work planned.

In addition the bureau will be glad to receive copies of printed matter used during the campaign. On request the bureau will send a franked envelope, which may be used in forwarding the material.

APPENDIX.

CARD INCLOSED WITH PACKAGES OF CLOTHING IN NEW YORK BABY WEEK.

Better Babies.

Better Mothers.

Better City.

Light, loose clothing, and cool sponge baths make the baby comfortable on hot days.

MAYOR'S BABY WEEK COMMISSION.

SLIPS ON CARE OF BABY'S BOTTLE.

[From New York City Better Baby Week.]

Care of Bottles.

After using bottles, wash with cold water, then clean with borax and hot water, using brush. (One teaspoonful of borax to one pint of water.)

Keep clean bottles upside down upon clean shelf.

Boil bottles before using again.

Care of Nipples.

After using rinse with cold water, then turn inside out and scrub well with brush and hot water.

Keep them in a cup of borax water between feedings.

Before using, always rinse them in boiling water.

BETTER BABIES.

BETTER MOTHERS.

BETTER CITY.

MAYOR'S BABY WEEK COMMISSION.

NEWSPAPER ARTICLES ON BABY WEEK USED IN VARIOUS CITIES.

NEW YORK CITY BETTER BABY WEEK.

THIS IS OUTING DAY FOR MOTHERS AND BABIES OF THE CITY—BABY WEEK ENDS OFFICIALLY TO-DAY, BUT THE GOOD THAT HAS BEEN DONE IS EXPECTED TO LAST FOR MANY WEEKS—A SPONTANEOUS INTEREST AND DESIRE TO HELP THINGS ALONG HAS BEEN SHOWN BY HUNDREDS OF PERSONS.

This is the last day of Baby Week, but it isn't the last day of the importance of the baby. Baby Week has done to New York's attitude toward babies what a large, active firecracker placed under the chair of a dozing grandfather might be expected to do. Not that New York hasn't been alive right along to the rights of the baby, but the poignancy of the realization has heretofore been centered among certain organizations and individuals. Baby Week has given every individual in New York a baby consciousness that isn't likely to slumber again in a hurry.

This last day is outing day for mothers and children, and pretty nearly every steamship company in the city volunteered craft which will steam over river, bay, and ocean all day long with burdens of babies.

This afternoon at 3 o'clock Mayor Mitchel is to receive the better babies committee at the city hall and will tender them the thanks of the city for the work accomplished during Baby Week.

No request for money has been made during the entire week of the baby campaign, but members of the committee say that a little money has come in, nevertheless, and, better than money, a spontaneous interest and desire to help things along has been shown by hundreds of people. The telephone in the better babies' office in the Municipal Building has been busied all week by men and women who wanted to know, "How can I help?"

Now that New York has awakened to a realization of its babies, there are many plans on foot for additional baby work. It is hoped that the city will appropriate needed money for activities which have heretofore been held up for lack of funds. Only 56 milk stations are maintained by the health board, and a survey of the birth and death rate, block by block, shows that at least 75 are needed. Workers among the mothers of children have found that many babies die because of ignorance of the mother in regard to proper care of herself, and nurses regard the prenatal work as one of the strongest and most necessary factors in a better baby campaign. There are at present, however, only 6 nurses doing the prenatal work; 40, according to health board workers, would be none too many.

We want every mother in New York City to feel that she can come to the health board for help just as freely as her children go to the New York City Better Baby Week.

To-day is Little Mothers' day, and in every school in the city the mayor's proclamation to the school children will be read and the kindergarten and first-grade classes will take the pledge to the baby:

I pledge to be a baby's friend
And everybody tell;
Clean air, clean clothing, and clean food
He needs to keep him well.

It is a particularly proud day too for the Little Mothers for they are to have special exercises in a score or more of public schools. Of course you know who the little mothers are. At least you would if you had ever tried walking down the street with your baby dressed all wrong or if you had carelessly let him have a lollipop to suck, or perhaps a baby pacifier. I guarantee that you wouldn't go five steps before a little fury would stand in your path and with blazing eyes and imperious mein demand that you take off those tight wrappings or throw away that pacifier.

Special lectures are given each year near the close of the school to these Little Mothers by board of health physicians who tell them just how to dress the baby, how to bathe baby, how to feed him, and all the many other "hows" which mean a better baby.

PITTSBURGH BABY WEEK.

PENNANTS FLYING FROM MANY HOMES FEATURE BABY WEEK—THOUSANDS OF STREAMERS DISTRIBUTED AMONG HOMES WHERE ARE LITTLE ONES—BOY SCOUTS ARE ASSISTING—MILK COMPANIES SEND OUT BOOKLETS GIVING ADVICE ON FEEDING BABIES.

The second day of Baby Week, 13,005 attractive and appropriate pennants were distributed this morning throughout the city and are now flying from homes where there are little ones under 1 year of age.

To almost every street and alley in the city squads of Boy Scouts, Camp Fire Girls, members of boys' brigades, and club women went this morning with the pennants and messages of cheer and instruction.

The pennants are to be flown from the homes each day of Baby Week, which ends Saturday with the registration of babies for the improvement contest.

With each pennant went a leaflet giving simple instructions and hints on the proper care of babies, particularly during the summer months, and this message:

"The city of Pittsburgh gives you this flag to hang from your window for a week in honor of your baby. The flags mean that all Pittsburgh is thinking and planning for the welfare of the thousands of babies."

The pennants, or flags, are attractive little affairs, white, with blue emblems, showing a healthy baby and the slogan: "Save the Kiddies!"

To make more complete the educational campaign, a booklet containing helps on the conservation of infant lives was distributed this morning with each bottle of milk sent out by the various milk companies of the city.

Plans have been about completed for to-morrow, which will be known as "brothers' and sisters' day." The chief feature will be a parade of hundreds of "Little Mothers," who, as volunteers, have done great work in saving babies. An outing will follow the parade.

CHICAGO BABY WEEK.

BEING A BABY IS HAZARDOUS BUSINESS.

In the Iroquois fire the toll was 600 lives. The Pelee volcanic eruption cost 40,000 lives. When the *Titanic* went down 1,100 were sacrificed. Everyone knows these facts. They are so big that they strike us like blows which we never forget.

But—do you know how many babies die in Chicago every year?

Do you know in what part of Chicago the infant mortality is greatest?

Do you know how the big cities rank in the care of their babies?

Have you read how the whole world is taking up the conservation of babies? Here are some facts: During 1913, 7,694 babies under 2 years of age died in Chicago. The health department estimates that 80 per cent of these deaths were preventable. Six thousand one hundred and fifty-five babies died who might have grown up into good citizens. Six thousand one hundred and fifty-five inhabitants make a large-sized town. When we estimate this in national figures the amount makes disasters like Pelee and Messina shrink into insignificance. Out of every five deaths in the United States last year one was a baby under 1 year old. Unenforced birth registration makes comparative statistics difficult. But one-quarter of a million babies under 1 year died last year.

CONSERVATION.

We are conserving our forests, our mines, our water power. What are we doing to conserve human life, our greatest national asset?

Is this conservation worth while to us as a State? If so, let us work for better woman and child legislation, expert laboratory service, State traveling infant-welfare exhibits.

Is it worth while to us as a city? If so, let us pass and enforce ordinances for clean streets and alleys; more infant-welfare stations, dispensaries, and hospitals; more parks and playgrounds.

BABY WEEK.

Is it worth while for you as an individual? Then ally yourself with the infant-welfare movement before April 19, 1914.

EDUCATIONAL PAMPHLETS AND LEAFLETS ON THE CARE OF THE BABY.

United States Public Health Service, Washington, D. C.:

Care of the Baby. Public Health Reports, Supplement No. 10. 14-page leaflet.

Summer Care of Infants. Public Health Reports, Supplement No. 16. 15-page leaflet.

Office of Home Economics, States Relations Service, United States Department of Agriculture, Washington, D. C.:

Farmer's Bulletin on meals for young children.

Children's Bureau, United States Department of Labor, Washington, D. C.:

Prenatal Care. A bulletin dealing with the care of the mother during pregnancy. 25 pp.

Infant Care. A bulletin dealing with the care of babies up to 2 years of age. 81 pp.

According to the rules of the department these bulletins can not be sent out in large numbers for redistribution. Small numbers of each can be sent to be used as

samples; if the names and addresses of individuals wishing these bulletins are sent to the Chief of the Children's Bureau, pamphlets will be sent free directly to the address given. These bulletins can be bought in quantity from the Superintendent of Documents. A price list will be sent on application.

American Medical Association, Council on Health and Public Instruction, 535 North Dearborn Street, Chicago, Ill.:

Save the Babies. Pamphlet No. 7. Pamphlet on the care of babies. 19 pp.

Score cards for use in baby health conferences.

Baby Health Conferences. Pamphlet No. 5. Description of the methods of holding baby health conferences according to the score card of the American Medical Association.

Anthropometric table.

Sample copies and price list are furnished on application to the secretary; also price list of packages made up with the number of each of the publications named above, necessary for baby health conferences of various sizes. Requests for material should be made as long in advance as possible.

American Association for Study and Prevention of Infant Mortality, 1211 Cathedral Street, Baltimore, Md.:

Motherhood. 6-page leaflet on prenatal care.

Russell Sage Foundation, Department of Child Helping, 130 East Twenty-second Street, New York City:

The Care of the Baby. 6-page leaflet.

National Committee for the Prevention of Blindness, 130 East Twenty-second Street, New York City:

Needlessly Blind for Life. 4-page leaflet on the prevention of blindness from babies' sore eyes.

What Women's Clubs and Nursing Organizations Can Do to Prevent Blindness. 4-page leaflet.

Summary of State Laws and Rulings Relating to the Prevention of Blindness from Babies' Sore Eyes.

LETTER FROM THE MAYOR OF INDIANAPOLIS INDORSING THE BABY-WEEK CAMPAIGN.

To the citizens of Indianapolis:

A large number of public-spirited men and women of the city have arranged to cooperate with the department of public health and other organizations especially interested in the welfare of little children and have designated the week beginning October 3 as a time in which to make a special effort to interest all citizens in doing those things which tend to the improvement of conditions and influences surrounding the little children of the city.

I therefore ask all citizens of Indianapolis to cooperate with the committee in charge of the work of arranging for this Baby Week, and I direct that the department of public health and charities of the city shall make a special effort to render a helpful service in this behalf.

In witness whereof I have hereunto set my hand and the seal of the city of Indianapolis this 24th day of September, 1915.

(Signed) J. E. BELL,
Mayor.

LETTER FROM THE MAYOR OF NEW YORK CITY TO THE CLERGY OF THE CITY.

CITY OF NEW YORK,
OFFICE OF MAYOR.

To the clergy of New York City:

The week of June 20 to 26 has been set apart by a committee of citizens cooperating with the health department as a week for considering the needs of the infants of this city. It has been suggested that the clergy of the city call to the attention of their congregations the plans of the committee in charge of this excellent undertaking. Their purpose is to fix the attention, especially during this week, of the whole city on the proper care of babies, particularly during hot weather, in order to further reduce infant mortality.

It is hardly necessary for me to say that this program seems particularly fitting for the churches' support. Much has been accomplished within the last few years in the saving and protecting of child life in New York. In order that

we may progress still further in reducing infant mortality and promoting the welfare of the children of the city, we must have the active cooperation of all citizens, and especially of the religious and civic organizations, which have so much concern for the city's welfare. I ask, therefore, that you bring this matter to the attention of your congregations, urging their cooperation with the committee in charge.

(Signed)

JOHN PURROY MITCHEL,

Mayor.

JUNE 17, 1914.

SUGGESTIONS FOR A CIRCULAR OF INFORMATION ON INFANT MORTALITY AND BABY WEEK, FOR USE IN THE PREPARATION OF SERMONS AND NEWSPAPER ARTICLES.

INFANT MORTALITY RATE.

What is an infant mortality rate? The terms "infant mortality rate" or "baby death rate" mean the relation between the number of babies under 1 year of age who die in one calendar year to the number of babies born alive during that year. This is usually expressed as the number of deaths of babies which occur for 1,000 live births.

Each country, each city or town, and each rural community should know first of all what its infant death rate is and then should do its utmost to lower this rate by all methods that have proved successful elsewhere.

What is the infant mortality rate of the United States? On account of the incomplete birth registration of this country the mortality rate can only be estimated. The Census Bureau estimated in 1911 that 124 deaths of babies occurred for 1,000 live births (this being the rate in that portion of the country known as the registration area). The estimate has been made that about 300,000 babies die yearly in this country. About one-fifth of the deaths occurring each year at all ages are of children under 1 year.

How does the infant death rate of other countries compare with that of this country?

Deaths of infants under 1 year of age per 1,000 live births in foreign countries.¹

Country.	Year.	Deaths under 1 year per 1,000 live births.	Country.	Year.	Deaths under 1 year per 1,000 live births.
Chile.....	1911	332	Serbia.....	1911	146
Russia.....	1909	248	Switzerland.....	1911	123
Ceylon.....	1912	215	Scotland.....	1911	112
Jamaica.....	1912	198	Ontario.....	1912	110
German Empire.....	1911	192	Finland.....	1912	109
Roumania.....	1912	186	England and Wales.....	1912	95
Hungary.....	1912	186	Denmark.....	1912	93
Austria.....	1912	180	Netherlands.....	1912	87
Bulgaria.....	1909	171	Ireland.....	1912	84
Belgium.....	1911	167	France.....	1912	78
Japan.....	1910	160	Australia.....	1912	72
Spain.....	1907	158	Sweden.....	1911	72
Italy.....	1911	153	Norway.....	1911	65
Prussia.....	1912	146	New Zealand.....	1912	51

¹ Compiled from statistics contained in the Seventy-fifth Annual Report of the Registrar General of Births, Deaths, and Marriages in England and Wales, 1912.

"The same conditions which cause the death of 13 out of every 100 babies born throughout the civilized world leave more or less permanent stamps on perhaps two or three times as many more babies who somehow manage to crawl over the infant dead line, many of whom will be the fathers and mothers of the next generation. The problem of infant mortality, therefore, is far more than one of decreasing the number of infant deaths. Its scope is world wide, and on its partial solution at least depends the welfare of posterity. The call for action on such a problem may fairly be called urgent."—E. B. Phelps.

"It was formerly believed that the rate of mortality among children who had not reached the first anniversary of their birth was a wise dispensation of nature, intended to prevent children with weak constitutions becoming too plentiful. To-day we know that a great infant mortality is a national disaster—on the one hand because numerous economic values are created without purpose and prematurely destroyed, and on the other because the causes of the high rate of infant mortality affect the powers of resistance of the other infants and weaken the strength of the nation in its next generation."—Prof. Dietrich.

CAUSES OF A HIGH INFANT MORTALITY RATE.

"The fundamental causes of infantile mortality are mainly the result of three conditions—poverty, ignorance, and neglect."—Dr. L. Emmett Holt.

A study of the relation of social and economic conditions to infant mortality is now being made by the United States Children's Bureau. Reports of the findings of this inquiry in a steel-manufacturing town and in a residential suburb have already been published and show a coincidence of underpaid fathers, overworked and ignorant mothers, and those hazards to the life of the offspring which individual parents can not avoid or control because they must be remedied by community action. The introduction to one of these reports says: "All this points toward the imperative need of ascertaining a standard of life for the American family, a standard which must rest upon such betterment of conditions of work and pay as will permit parents to safeguard infants within the household."

There are three groups of diseases which together cause about three-fourths of all the deaths among babies. These three groups are:

1. Digestive diseases, which cause most of the deaths of babies in summer. Bottle-fed babies are most often affected.

2. Diseases of the lungs.

3. Diseases due to conditions affecting the child before or at birth.

Some of the causes which lead to these are:

1. Of the digestive diseases: Lack of breast feeding; improper feeding; impure milk; carelessness of mothers; hot weather; overcrowding, bad housing, and bad sanitary conditions.

2. Of the diseases of the lungs: Infections, bad air.

3. Of the diseases due to conditions affecting the child before birth: Sickness in the parents, overwork of the mother, improper care before or at birth.

"Because the United States differs from other civilized countries in having no general system of birth registration it is impossible to state with accuracy our proportionate loss, but we have the estimate of the Census Bureau that our actual loss last year was about 300,000 babies under 1 year of age, of whom at least half would now be living had we, as individuals and communities, applied those measures of hygiene and sanitation which are known and available. Here is a vast and unmeasured loss of infant life due solely to individual and civic neglect. The economic and industrial significance of such a loss in the general scheme of social well-being is beginning to be realized. It was once thought that a high infant death rate indicated a greater degree of vigor in the survivors. Now it is agreed that the conditions which destroy so many of the youngest lives of the community must also result in crippling and maiming many others and must react unfavorably upon the health of the entire community."—First Annual Report United States Children's Bureau.

"Infant mortality is the most sensitive index we possess of social welfare and of sanitary administration."—Sir Arthur Newsholme.

HOW TO PREVENT A HIGH INFANT MORTALITY RATE.

We are told that about one-half of the deaths of babies under 1 year may be prevented. How can this be accomplished?

PART PLAYED BY THE PARENTS IN PREVENTION.

1. *Intelligent care by the mother.*—Every mother has a right to know the facts which science has made certain as to ways in which it is possible to protect babies from sickness and death.

"Give me intelligent motherhood and good prenatal conditions, and I have no doubt of the future of this or any other nation."—John Burns.

"In the education of the mother in the care of herself and her baby we have the strongest weapon for fighting infant mortality."—New York Milk Committee's Report.

2. *Prenatal care of the mothers.*—The great group of deaths of babies from causes acting before or at birth can only be prevented by intelligent care by the mother of herself before birth; protection of the mother by her husband from overwork; skillful care at the time of confinement; health of both parents.

PART PLAYED BY THE COMMUNITY.

1. *Infant-welfare work.*—"Community action can remedy many conditions dangerous to the lives of infants. The purity of the water, the milk, and the food supply; the cleanliness of streets and alleys; the disposal of waste—all these are within the control of the community. But the public responsibility does not end merely in remedying physical conditions. There is a growing tendency on the part of municipalities to accept responsibility for furnishing information and instruction to its citizens through instructive visiting nurses, baby-welfare and consultation stations, and the distribution of literature for the guidance of others. Work for infant welfare is coming to be regarded as more than a philanthropy or an expression of good will. It is a profoundly important public concern which tests the public spirit and the democracy of a community. There is, perhaps, no better sign of the modernness of a city's administration than the proportion of its income which is assigned to the protection of infancy and childhood, though it is fair to remind ourselves that a large amount of invaluable volunteer work is going on in many cities whose budgets show no item for this purpose. But whether by public or private effort the community increasingly accepts its share of responsibility for the healthfulness of individual dwelling places and their fitness for the rearing of children."—Second Annual Report, United States Children's Bureau.

The instruction of mothers through infant-welfare or milk stations and visiting nurses is the most important immediate work for the prevention of infant mortality.

"Infant-welfare stations afford an opportunity to give poor mothers the benefit of personal advice by experts in the care and feeding of infants. Wherever these have been in successful operation the infant mortality has been materially reduced. At these centers the mother receives instruction in the care and feeding of her child, both in sickness and in health. The necessity for breast feeding is emphasized and, where this is impossible, the nurse on her visits to the home teaches the mother how to prepare the feedings. The importance of clean pasteurized milk is demonstrated and at many stations such milk is furnished at a moderate cost. Germany now has 555 infant-welfare stations in 345 different localities; England has over 200, and there were before the war 77 in Belgium. In the entire State of New York, outside of the city of New York, there were in 1913 only 32 such stations in 12 different localities. The public-health commission appointed by the governor, which drafted the present public-health law, recommended that 'each city with a population in excess of 10,000 and having an industrial population should have one infant-welfare station, and larger cities with an industrial population should have one such station for approximately each 20,000 inhabitants.'"—Circular of the New York State Department of Health, 1915.

2. *Public-health or visiting nurses.*—Where communities can not afford to support infant-welfare stations even during the summer months help given to the mothers in their homes by visiting nurses, under the direction of the family physician, does much good.

Little Mothers' Leagues are associations of girls in the upper grades of schools to whom instruction is given in the proper care and feeding of babies. Much good has been accomplished by them.

3. *Improvement of the milk supply.*—Each community should make certain that the milk provided for its babies is pure. This can be done only by the appropriation of sufficient money to insure a proper inspection of the milk supply.

4. *Sanitary conditions.*—Overcrowding, insanitary houses and streets, bad water, bad sewerage, are potent factors in causing a high infant mortality rate. The community is responsible for the protection of its babies from these dangers.

BABY WEEK.

A Baby Week is a campaign with a twofold purpose: (1) To give the mothers and fathers of a community the opportunity of learning the most important facts with regard to the care of the baby. (2) To bring home to the community a knowledge of the facts regarding the needless deaths of its babies and a realization of the ways in which it must protect them.

A Baby Week should be a community campaign; each person in the community should feel that he or she has a part in it.

A Baby Week should not be a temporary flurry and excitement, but should lead to permanent work for the babies.

Chicago held the first Baby Week, April 19 to 25, 1914; New York City the second, June 20 to 26, 1914. This year they have been followed by Pittsburgh, Grand Rapids, Detroit, Staten Island, Yonkers, Indianapolis, Topeka, and many other cities.

LETTER TO FATHERS.

[Adapted from message sent out during the Pittsburgh Baby Week.]

Tradition has, in the past, left all the care of the baby to the mother. The conditions of our present-day society require that, in addition to providing food, shelter, and other material things, the father must share with the mother the responsibility for the health of his baby.

The following are some of the things that he should understand or do:

He should understand the importance of prospective mothers having good care and advice at as early a period as possible so as to insure the health of the mother and protect the coming baby.

He should see that the mother has adequate care during and after the birth of the baby, so that the mother's health may be continued or restored as quickly as possible, both for her own sake and that she may be able to give proper care to the baby.

He should know the importance of the mother nursing her baby. Breast-fed babies have a much greater chance of living and becoming strong, healthy children than have bottle-fed babies. This is so important that anything that would alter or lessen the mother's milk supply, such as overwork, excitement, shock, or worry, should be avoided.

If, after every effort is made, the mother's milk supply is not adequate, the father should know that clean, fresh cows' milk is the best substitute, and should see that the baby gets such milk and that the mother has the advice of the doctor on its preparation.

He should know that nearly one-third of all infant deaths occur as the result of digestive disturbance brought on chiefly by faulty feeding.

He should know that soothing sirups are dangerous, that pacifiers are both needless and injurious, that the baby needs rest and regular hours of sleeping, and should not be kept up late nor handled too much.

He should know the importance of good surroundings to the baby. The baby needs fresh air and sunlight as much as any plant. Like a plant, the baby will droop and die if kept in a dark, close room, deprived of nature's best health tonics—fresh air and sunlight.

Cleanliness in and about the home is even more important to the baby than to the adult. Baby can not protect itself against dust, dirt, and flies. Flies bred in the open garbage can or in the rubbish heap in the yard may carry germs to the baby's mouth or milk and cause diarrhea or other diseases.

The father should not fail to have his baby's birth registered at the health department. A certificate of birth will be necessary for school attendance, going to work, inheritance, and citizenship.

Lastly, every father should know of and take an active part in promoting conditions in our city which will give every baby a better chance. Some of these things are better industrial conditions, better housing, improved municipal sanitation, improved milk supply, milk stations, and visiting nurses, settlements, nurseries, and other agencies for the protection and conservation of infant life. He should know what his own health department is doing.

PLAYS FOR CHILDREN.

ON BABY WELFARE.

(By G. W. P. BAIRD, University of Pittsburgh, for the Pittsburgh Baby Week. Published in the *Journal of the Outdoor Life*, November, 1915, 289 Fourth Avenue, New York City.)

The Theft of Thistledown.

The Narrow Door.

Plays may be produced if the author is notified in advance and is sent a copy of the program.

ON VARIOUS SUBJECTS.

(By HESTER D. JENKINS, bureau of charities, Brooklyn, N. Y.)

Mother Goose Up to Date (Health).

Judith and Ariel (Fresh air).

Our Friends the Foods (Food).

In a Tenement (Tenements).

Killing Giants (Juvenile court).

TRAVELING EXHIBITS AND LANTERN SLIDES ON INFANT AND PRENATAL CARE, INFANT WELFARE, AND PUBLIC HEALTH NURSES.

Material in many cases is loaned free if transportation is paid. In some cases a small rental fee is asked in addition. In most cases the condition is made that broken lantern slides shall be paid for by the borrower. Further information may be obtained from the secretaries of the organizations. Applications for exhibit material and lantern slides should be made as long as possible in advance.

UNITED STATES PUBLIC HEALTH SERVICE, WASHINGTON, D. C.

Lantern slides.—Two thousand views dealing with various public-health problems; 80 slides on the subject of milk.

CHILDREN'S BUREAU, UNITED STATES DEPARTMENT OF LABOR, WASHINGTON, D. C.

Exhibit material.—Twelve wall charts on infant welfare mounted on linen; 20 by 40 inches. Sent under frank.

Lantern slides.—Set of 50 lantern slides on infant care, each slide having an appropriate label of explanation; no outline for lecture. Sent under frank.

OFFICE OF HOME ECONOMICS, STATES RELATIONS SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

Colored food and diet charts, useful in exhibits on the subject of food for young children. To be obtained from the Superintendent of Documents, Washington, D. C.

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY, 1211 CATHEDRAL STREET, BALTIMORE, MD.

Exhibit material.—Scope: Illustrates causes and extent of baby sickness and death; how to keep the baby well; right food for the baby; baby life-saving stations. Contents: 35 panels; 5 single introductory panels; 6 cabinet screens, each of which holds 5 panels; no wall attachments. Space required: 80 linear feet; 4 feet from wall to exhibit; walls must be at least 10 feet high. Weight: 1,550 pounds; packed in 8 boxes; usually shipped by freight.

Lantern slides.—Collection of 50 slides, based on traveling exhibit, accompanied by brief descriptive statement.

NATIONAL CHILD-WELFARE EXHIBIT ASSOCIATION, 36 EAST FORTY-SECOND STREET, NEW YORK CITY.

Exhibit material.—Four exhibit sections dealing with infant care, each section composed of 5 panels, 3 by 6 feet. When packed ready for transportation each section weighs about 240 pounds.

NATIONAL COMMITTEE FOR THE PREVENTION OF BLINDNESS, ROOM 510, 120 EAST TWENTY-SECOND STREET, NEW YORK CITY.

Exhibit material.—Two sizes of exhibits on babies' sore eyes: Large exhibit, 5 panels, 34 by 68 inches, standard raising the exhibit 2 feet from the floor; wall space required, 14 feet 2 inches long, 7 feet 2 inches high; weight, ready for shipment, 230 pounds. Small exhibit, 5 panels, each 18 by 40 inches; wall space required, 7 feet 6 inches by 3 feet 4 inches; weight, ready for shipment, 20 pounds.

Lantern slides.—Seventy-seven on babies' sore eyes; outline for a lecture or a complete lecture supplied, according to request.

RUSSELL SAGE FOUNDATION, DEPARTMENT OF CHILD HELPING, 130 EAST TWENTY-SECOND STREET, NEW YORK CITY.

Exhibit material.—Ten panels 3 by 6 feet on infant care; weight ready for transportation, two cases, each 225 pounds.

Lantern slides.—Sixteen lantern slides on visiting nursing.

PUBLIC HEALTH NURSE QUARTERLY, 612 ST. CLAIR AVENUE NORTHEAST, CLEVELAND, OHIO.

Lantern slides.—Fifty lantern slides on public health nursing; descriptive lecture accompanies the slides.

RED CROSS TOWN AND COUNTRY NURSING SERVICE, 1624 H STREET, WASHINGTON, D. C.

Exhibit material.—Thirteen panels, 2 by 2½ feet, descriptive of the activities of the visiting nurse in rural communities and small towns; 2 panels on infant-welfare work; to be hung in tiers of three; requires 13 by 6 feet wall space; exhibit of 6 cabinets, each 8 feet 6 inches by 34 inches by 10 inches; one cabinet on infant-welfare work; weight ready for shipment, 1,200 pounds.

Lantern slides.—Fifteen to 20 on the same subject.

Motion-picture film on the subject of the work of the visiting nurse in rural communities and small towns.

AMERICAN MEDICAL ASSOCIATION, COUNCIL ON HEALTH AND PUBLIC INSTRUCTION, 535 NORTH DEARBORN STREET, CHICAGO, ILL.

Cartoons on infant welfare and public health available for exhibits; cuts of the same.

TITLES OF PANELS IN SEVERAL INFANT-WELFARE EXHIBITS.

CHILDREN'S BUREAU.

Baby's Rights.
Care Before Birth.
Nursing the Baby.
Mother's Milk.
What Mother's Milk Did for This Baby.
Artificial Food.
Baby Needs Air.
Colds and Pneumonia.
Baby's Foes.
When Mother Works.
Low Wages.
Mothers' Pensions.
In the Same Town.

NEW YORK STATE DEPARTMENT OF HEALTH.

The Necessity of Healthy Parents.
Birth Registration—Importance of birth certificates.
Birth Registration—Proof of age required by civil service and some employers.
Infant Mortality—Electric flash light going out every time a baby dies in the civilized world.
Necessity of Breast Feeding.
Health Creed for a Well Baby.
Pasteurized Milk.

Care of Milk in the Home.
 Dangerous Soothing Sirups.
 Dangerous Foods.
 Fresh Air for the Baby.
 Where Babies Die (housing conditions).
 The Fly Pest.
 Vaccination—Prevention of blindness in babies.
 Common Colds—What they may lead to.
 How Colds are "Caught."
 How to Handle the Baby.
 Bathing the Baby.
 Education of the Mother Will Reduce the Infant Death Rate in Your City.
 Infant Welfare Stations—Their value.

PITTSBURGH BABY WEEK EXHIBIT.

Prenatal care:

How to Save the Babies.
 Care Before Birth.
 The Working Mother.
 Why the Baby Died.
 Father Pitt Offers the Mothers Advice and Help in Caring for the Babies.

Birth:

Babies' Sore Eyes.
 Prevent Sore Eyes.
 Regulation of Midwives.
 Baby's Rights.

Feeding:

Why Baby Should Be Nursed.
 Mother's Milk.
 Nursing the Baby.
 What a Patent Food Did for This Baby.
 Artificial Food.

Milk:

●
 Dangerous Milk.
 Dairy and Milk Inspection.
 Certified Milk—What it is.
 Certified Milk—Method of supervision.

Care of mother and baby:

Causes of Baby Deaths.
 Catching Diseases.
 Measles and Whooping Cough.
 Light and Air.
 Flies.

Saving babies:

Baby Welfare Week.
 Little Mothers.
 Work of Nurse.
 The Nursing Bottle.
 Happy Babies.

RUSSELL SAGE FOUNDATION, DEPARTMENT OF CHILD HELPING.

All Births Should be Registered.
 Our Country's Faulty Records.
 A Baby Dies in the United States Every Time This Star Fades.
 Baby's Pilgrim's Progress Through the Valley of the Shadow of Death.
 How to Save Babies.
 The Beginning of Life.
 Mother's Milk.
 What Mother's Milk Did for These Babies.
 What a Patent Food Did for These Babies.
 Artificial Feeding.
 Feeding the Baby.
 Flies are Carriers of Disease.
 Colds.
 Whooping Cough.
 Measles.

LIST OF ARTICLES IN EXHIBIT ON INFANT CARE AT THE EXHIBIT OF THE CHILDREN'S BUREAU, PANAMA-PACIFIC EXPOSITION.

CLOTHING FOR THE BABY.

Hot-weather costume.—Cotton band and diaper.

Winter costume.—Shirt, diaper, band, stockings, shoes, skirt, slip. Night-gown and wrapper.

Two dolls dressed in these costumes.

SLEEPING ARRANGEMENTS.

Homemade crib for young baby.—Clothes basket, mattress of silence cloth, mattress cover, rubber sheeting, sheets, blankets. Such a crib is described and illustrated in *Infant Care*, United States Children's Bureau publication No. 8, page 12.

Crib for older baby.—Iron crib with high sides, mattress, bedding as above, mosquito netting to cover bed.

BATHING ARRANGEMENTS.

A washable "hospital" doll, which may be used by the nurse in demonstrating the baby's bath, low table and chair, bath tub, pitcher for warm water, bath thermometer, towels and wash cloths, bath apron, bath accessories—good soap, vaseline, talcum powder, boric acid, absorbent cotton.

OBJECTS NEEDED FOR PREPARATION OF MODIFIED MILK.

Portable gas stove, two burners (electric plate may be used), nursing bottles (8 ounces—cylindrical), nipples, covered glass for nipples, clean corks, bottle brush, graduated measuring glass, two quart pitchers, one funnel, long-handled spoon for stirring, pail or kettle for pasteurizing milk and sterilizing utensils (for home pasteurizers and use, see *Infant Care*, pp. 40 to 46), tablespoon, double boiler for cooking cereals.

SCALES FOR WEIGHING BABY.

Scale having balance beam and platform; suitable basket or pan on platform for holding baby.

PLAYPEN FOR OLDER BABIES.

For description, see *Infant Care*, page 24.

OTHER ARTICLES WHICH MAY BE SUGGESTED.

Homemade icebox. (See *Infant Care*, p. 41.)

Homemade fireless cooker. (See Circular 776, States Relations Service, United States Department of Agriculture.)

Homemade iceless refrigerator. (See Circular 778, States Relations Service, United States Department of Agriculture.)

HOMES OF DO CARE AND DON'T CARE FAMILIES.

An interesting feature of an exhibit is the display of good and bad kitchens or good and bad nurseries, which reproduce typical rooms to be found in the town where the exhibit is held.

Two rooms, approximately 8 to 10 feet square, are constructed and furnished to represent two contrasting kitchens or nurseries. The furnishings must be similar, but while that belonging to Mrs. Do Care is shown in model order the other, belonging to Mrs. Don't Care, is carelessly or ignorantly cared for. It is not advisable, however, to make the contrasts so extreme that both seem unreal.

CONTRASTS.

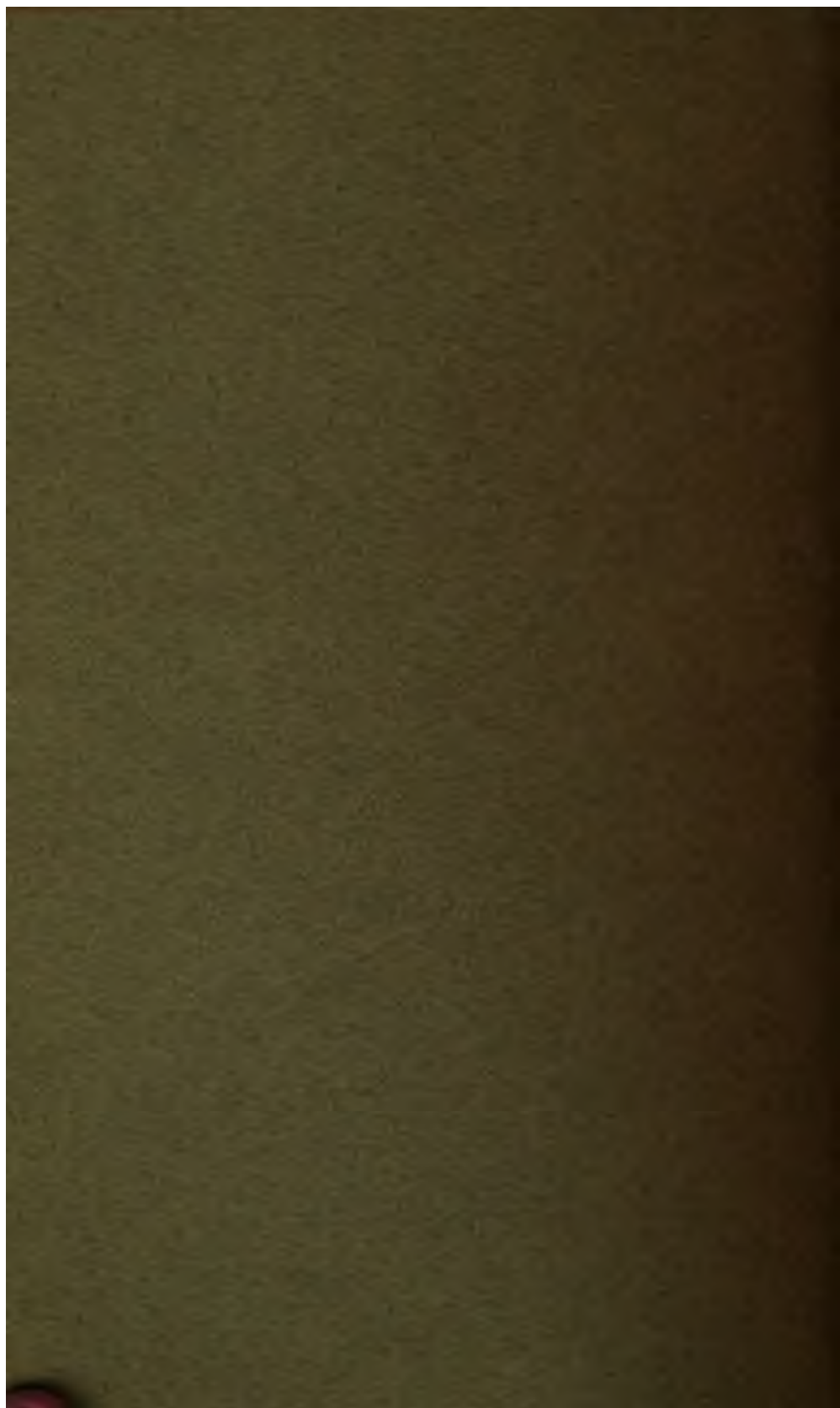
Do Care.

Neat and clean wall paper.
Windows screened.
No flies.
Milk covered.
Clean stove.
Dust cloths, etc.

Don't Care.

Ugly and untidy wall paper.
No screens.
Flies.
Milk uncovered.
Dirty stove.
Feather duster, etc.





506.2376 37.5

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, CHIEF

BABY-WEEK CAMPAIGNS

(REVISED EDITION)

MISCELLANEOUS SERIES No. 5

Bureau Publication No. 15



WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

PUBLICATIONS OF THE CHILDREN'S BUREAU.

Annual Reports:

- Third Annual Report of the Chief, Children's Bureau, to the Secretary of Labor, for the fiscal year ended June 30, 1915. 26 pp. 1915.
Fourth Annual Report of the Chief, Children's Bureau, to the Secretary of Labor, for the fiscal year ended June 30, 1916. 27 pp. 1916.

Care of Children Series:

- No. 1. Prenatal Care, by Mrs. Max West. 41 pp. 4th ed. 1915. Bureau publication No. 4.
No. 2. Infant Care, by Mrs. Max West. 27 pp. 1914. Bureau publication No. 3.

Dependent, Defective, and Delinquent Classes Series:

- No. 1. Laws Relating to Mothers' Pensions in the United States, Denmark, and New Zealand. 162 pp. 1914. Bureau publication No. 7. (Out of print. Revised edition in preparation.)
No. 2. Mental Defectives in the District of Columbia: A brief description of local conditions and the need for custodial care and training. 39 pp. 1915. Bureau publication No. 12.

Infant Mortality Series:

- No. 1. Baby-Saving Campaigns: A preliminary report on what American cities are doing to prevent infant mortality. 93 pp. 4th ed. 1915. Bureau publication No. 3. (Bureau supply exhausted. Copies may be purchased from Superintendent of Documents at 15 cents each.)
No. 2. New Zealand Society for the Health of Women and Children: An example of methods of baby-saving work in small towns and rural districts. 18 pp. 1914. Bureau publication No. 6.
No. 3. Infant Mortality: Results of a field study in Joliettown, Pa., based on births in one calendar year, by Emma Duke. 93 pp. and 9 pp. illus. 1915. Bureau publication No. 9.
No. 4. Infant Mortality, Montclair, N. J.: A study of infant mortality in a suburban community. 95 pp. 1915. Bureau publication No. 11.
No. 5. A Tabular Statement of Infant-Welfare Work by Public and Private Agencies in the United States, by Etta R. Goodwin. 114 pp. 1916. Bureau publication No. 16.
No. 6. Infant Mortality: Results of a field study in Manchester, N. H., based on births in one year, by Beatrice Sheets Duncan and Emma Duke. Bureau publication No. 20. (In press.)

Industrial Series:

- No. 1. Child-Labor Legislation in the United States, by Helen L. Sumner and Ella A. Merritt. 1,131 pp. 2 charts. 1915. Bureau publication No. 10.

Reprints from the above are also issued as follows:

- Child-Labor Legislation in the United States: Separate No. 1.
Analytical tables. 475 pp. 2 charts.
Child-Labor Legislation in the United States: Separates Nos. 2 to 54. Text of laws for each State separately.
Separate No. 55. Text of Federal child-labor law. 1916.

No. 2. Administration of Child-Labor Laws:

Part 1. Employment-Certificate System, Connecticut, by Helen L. Sumner and Ethel E. Hanks. 69 pp. 2 charts. 1915. Bureau publication No. 12.

Part 2. Employment-Certificate System, New York, by Helen L. Sumner and Ethel E. Hanks. 164 pp. 3 charts. 1917. Bureau publication No. 17.

- No. 3. List of References on Child Labor. 161 pp. 1916. Bureau publication No. 15.

(See also third page of cover.)

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

BABY-WEEK CAMPAIGNS

(REVISED EDITION)

MISCELLANEOUS SERIES No. 5

Bureau Publication No. 15



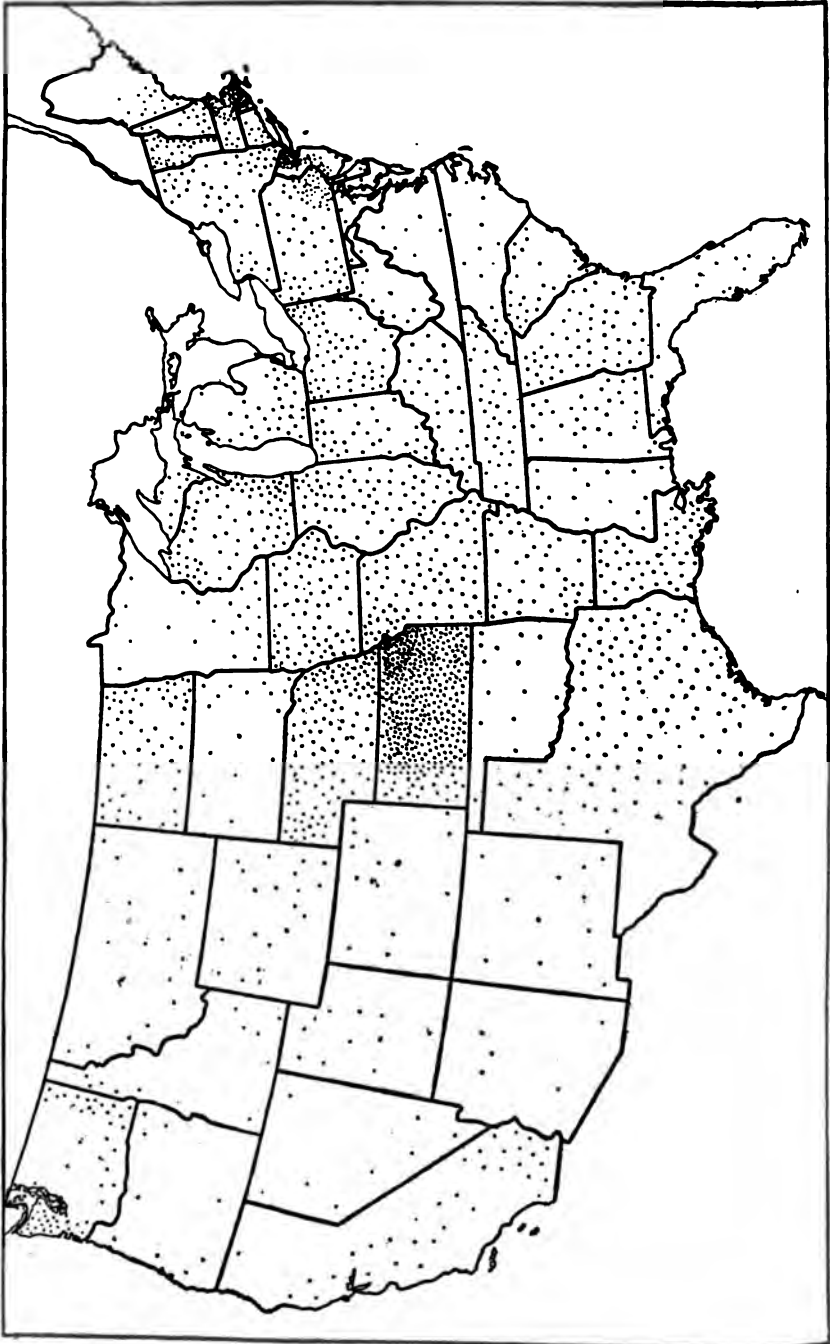
WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

April 27, 1917

Printed in the

United States Government.

Baby-week campaigns. Approximate situation of communities which took part in the nation-wide baby-week campaign, 1916. Reports have been received from a few additional communities since the map was prepared.



Map prepared by Children's Bureau, U. S. Department of Labor.

CONTENTS.

Letter of transmittal.....	Page. 7
PART I. BABY WEEK IN 1916.	
Introduction.....	9-13
Preparation for the nation-wide baby week.....	9
Extent of the celebration.....	10
Plans for 1917.....	13
Typical local campaigns.....	13-27
Organization.....	13-14
Cost.....	14
Campaigns in small towns and rural districts.....	14
County campaigns.....	19
Campaigns in large cities.....	23
State campaigns.....	27-34
Governors' proclamations.....	27
What State federations of women's clubs did	28-31
State-wide publicity.....	28
Cooperation with other State organizations.....	30
Publishing infant mortality figures.....	30
Securing reports of local campaigns.....	31
What State universities and agricultural colleges did.....	31
What State health officers did.....	32-34
State divisions or bureaus of child hygiene.....	34
Details of baby-week programs.....	35-64
Program of days.....	35-43
Flag day.....	35
Baby Sunday.....	36
Fathers' day.....	36
Outing day.....	37
Visiting day and parades.....	37
School day and school cooperation.....	38
Birth-registration day.....	42
Baby-welfare information.....	43-45
Birth registration.....	43
Baby death rates.....	43
Community conditions and baby-welfare work.....	44
Baby-welfare exhibits.....	45-49
Interesting devices.....	45
Exhibits on baby care.....	46
Securing exhibit material.....	48
Moving and changing exhibits.....	49
Baby-health conferences.....	49-51
Popularity of noncompetitive conference.....	49
Appointments in advance.....	50

Details of baby-week programs—Continued.	Page.
Competitions of various kinds.....	51-53
Poster competitions.....	51
County competitions.....	51
Better-mothers competitions.....	52
Other competitions.....	53
Meetings.....	53-54
Securing an audience.....	53
Where meetings were held.....	54
Special meetings for non-English-speaking audiences.....	54
Plays.....	54
Pamphlets on baby care.....	55
Methods of distribution.....	55
Publicity.....	55-64
Newspapers.....	56
Slogans.....	57
Posters.....	58
Stationery and programs.....	59
Leaflets, cards, tags, etc.....	59
Baby-week literature.....	60
Cooperation of merchants and other business men.....	63
Follow-up work.....	64

PART II. OUTLINE OF SUGGESTIONS FOR BABY-WEEK CAMPAIGNS.

Purpose and general plan of a baby week.....	69
Organizing a baby week.....	70-73
Committees.....	71
Time of holding baby week.....	73
Cost.....	73
Details of baby-week programs.....	73-78
Program for a baby day.....	74
Program of days.....	74-78
Flag day.....	74
Baby Sunday.....	76
Fathers' day.....	76
Outing day.....	76
Visiting day and parades.....	76
School day.....	77
Birth-registration day.....	77
Baby-welfare information.....	78-80
Birth registration.....	78
Baby death rate.....	78
Baby-welfare work.....	80
Community conditions.....	80
Baby-welfare exhibit.....	81-85
Subject matter of an exhibit.....	81
Securing exhibit material.....	82-85
Making wall panels.....	82
Exhibit of objects.....	84
Demonstrations.....	84
Explainers.....	85
Publicity about the exhibit.....	85

CONTENTS.

5

	Page.
Baby-health conferences.....	86-89
Baby-health conference without score card.....	87
Baby-health conference with score card.....	88
Baby-improvement contest.....	88
Competitions of various kinds.....	89
Meetings.....	89-92
Mass meeting or rally.....	89
Informal meetings.....	91
Talks at meetings of clubs and societies.....	91
Lantern slides.....	91
Motion pictures.....	92
Plays.....	92
Pamphlets on baby welfare.....	92
Publicity.....	93-94
Newspapers.....	93
Cooperation of merchants and other business men.....	94
Follow-up work.....	94-99
Public-health or visiting nurses.....	95
Infant-welfare stations.....	97
Instruction of young girls in infant hygiene.....	98
Birth registration.....	98
Divisions or bureaus of child hygiene.....	99
Improvement of community conditions.....	99
Study clubs.....	99
Please report on your baby-week.....	100

APPENDIX.

Communities in which a baby-week campaign was held in 1916.....	101
Communities in which a baby-week campaign was held, 1916, classified according to population.....	108
Suggestions for a circular of information for use in the preparation of sermons and newspaper articles.....	109
Letter from the mayor of New York City to the clergy of the city.....	113
A circular distributed to teachers in Washington, D. C., as basis for talks to pupils on little-mothers' day.....	113
Articles in the Children's Bureau exhibit on infant care at the Panama-Pacific Exposition.....	114
Articles which have been used in baby-welfare exhibits.....	115
Titles of panels in several baby-welfare exhibits.....	116
Traveling exhibits, lantern slides, and educational literature obtainable from various sources.....	117
Assistance offered by State authorities throughout the country.....	121
Records of children's health conference.....	132
Plays for children.....	134
Examples of newspaper articles on baby week.....	136
Message to fathers.....	138
Stories published in a baby-week leaflet at Grand Rapids, Mich.....	141
A list of cradle songs, etc., published by the New York City baby-week committee.....	143
New York City baby week. Baby Sabbath, May 6; Baby Sunday, May 7....	143
Letter describing articles for care and amusement of young children shown in the Boonton (N. J.) baby-week exhibit.....	144
Index.....	145

ILLUSTRATIONS.

Frontispiece: Baby-week campaigns. (Map.)

1. Baby week was celebrated on Indian reservations. Reproduced from Indian Babies, How to Keep Them Well, published by the Office of Indian Affairs, Department of the Interior.
2. "The Baby Special" run by the Capleville Cooperative Club to the exhibit at Memphis. A practical example of cooperation between city and country.
3. A baby-week parade in North Dakota.
4. Examples of baby-week printed matter used in different towns.
5. A baby-week newspaper cartoon. Reproduced by courtesy of Baltimore Evening Sun.
6. This prize-winning poster in a newspaper contest was made by a schoolboy. The picture was clipped from a magazine; the glass, bottle, and lettering were done by hand. Reproduced by courtesy of Baltimore Evening Sun.
7. One method of advertising baby week used in Helena, Ark.
8. Attractive lessons on an unpleasant subject. Designs used for posters and pasters issued by the New York Association for Improving the Condition of the Poor. Design shown at the right won first prize among public-school children of New York City (two small cuts).
9. Suggestion for a fathers' day leaflet (from The Chatauquan, Valley City, N. Dak.).
10. This certificate, presented to parents of every newly registered baby in Cleveland, stimulates interest in birth registration and the reporting by the parents of unregistered babies.
11. A panel from the blue-print exhibit prepared by the Pennsylvania Department of Health.
12. Everything prepared for a demonstration of baby care (Stamford, Conn.).
13. Well-arranged exhibit of food for young children, at Erie, Pa.
14. A public-health exhibit from Lawrence, Mass.
15. Clothing for a little girl at minimum cost, exhibited at Boonton, N. J.
16. Homemade articles for the care and amusement of young children, exhibited in Boonton, N. J.

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, January 13, 1917.

SIR: Herewith I transmit a revised and enlarged edition of the bulletin entitled "Baby-Week Campaigns," which was first published by the Children's Bureau in 1915.

Part I gives an account of the nation-wide baby-week campaign of 1916, held under the joint auspices of the Children's Bureau and the General Federation of Women's Clubs, with descriptions of certain typical campaigns and of features which proved of special value. Part II gives in outline form detailed practical suggestions for planning and carrying out baby-week campaigns.

The bulletin contains also an appendix, with a list of exhibit material and educational pamphlets supplied by various Federal and State agencies and by national organizations. It includes a circular of information about infant mortality and the text of a few leaflets. It also gives a list of plays and certain other material which has been used in baby weeks in various localities.

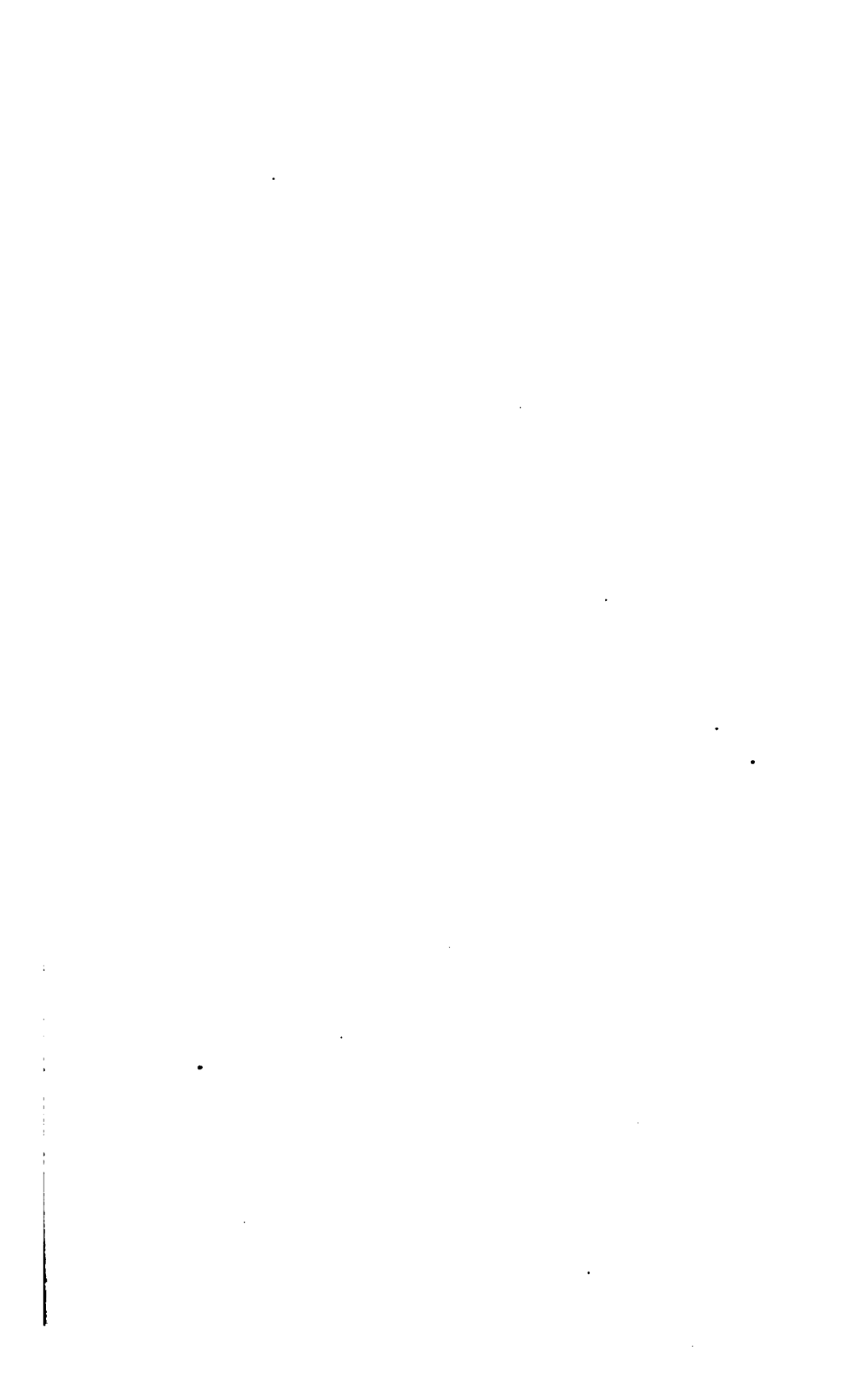
The history of the celebration of 1916 shows a remarkable degree of public-spirited cooperation, in which officials, private organizations, and individuals joined. Each community paid for its own observance. The total expenditure was small, and some of the best celebrations cost only a few dollars. The bureau is already in receipt of much information showing permanent work for child welfare resulting from these celebrations.

This bulletin has been prepared under the direction of Dr. Grace L. Meigs. The new material has been compiled by Mrs. Constance Leupp Todd, with the assistance of Miss Anna Rochester and Mrs. Etta R. Goodwin.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

HON. WILLIAM B. WILSON,
Secretary of Labor.



PART I. BABY WEEK IN 1916.

INTRODUCTION.

Baby week was inaugurated by Chicago in 1914, and a second baby week was celebrated by New York City in June of the same year. Following their lead, Pittsburgh, Indianapolis, Topeka, Grand Rapids, and a few other cities held similar celebrations, consisting of a week dedicated to the welfare of babies. Lectures, exhibits, baby-health conferences and contests, school programs, parades, plays, the distribution of pamphlets, leaflets, and other printed matter on the care of the baby, newspaper publicity, and other expedients were used to concentrate attention for seven days on the baby's needs, with an emphasis calculated to inspire a popular response and result in permanent work for the reduction of infant mortality and for improvement in conditions affecting the welfare of babies and young children.

Preparation for the nation-wide baby week.

In the fall of 1915 the General Federation of Women's Clubs and the Children's Bureau announced their purpose to cooperate in promoting a nation-wide baby week to be held in the spring of 1916. March 4 to 11 was suggested as the date, but it was made plain that a baby week at any other period would be regarded as part of the nation-wide campaign.

The President and the Secretary of Labor gave public indorsement to the plan; many governors and mayors issued proclamations on the subject.

The General Federation of Women's Clubs and the Children's Bureau urged all appropriate national, State, and local organizations and all individuals interested in infant welfare to participate. From the general federation the message was carried to the officers of the State federations. Through the General Federation of Women's Clubs Magazine, through the publicity department of the federation, through press material issued by the Children's Bureau, and through the active interest of numerous periodicals and news bureaus the baby-week idea not only reached the more than 2,000,000 women identified with the general and State federations of women's clubs but received wide publicity throughout the country.

Interest in the movement led the United States Reclamation Service to devote a generous amount of space in one issue of the Reclamation Record to an appeal to "project women" to respond to the call of the federation. The plans adapted themselves well to the policy of the Commissioner of Indian Affairs in urging employees in the Indian Service to use every occasion to work for the preservation of infant lives. The Public Health Service was one of the largest contributors of material on the care of the baby for distribution in communities in all parts of the country. The Office of Home Economics of the Department of Agriculture prepared a special bulletin on Food for Young Children, which was widely circulated. The National Congress of Mothers and Parent-Teacher Associations cooperated actively in State and local campaigns. Many other national organizations responded and took means to interest local branches. Secretaries and members of State boards or departments of health and State registrars of vital statistics approved the plan and took an active part in the campaign. Extension divisions of State universities and agricultural colleges gave great assistance. Child-welfare organizations, visiting-nurse associations, churches, schools, libraries, and other civic bodies, magazines and newspapers, department stores and other commercial organizations, and a score of other agencies helped.

Extent of the celebration.

As a result of this widespread cooperation several thousand American cities, towns, and rural communities organized and celebrated baby weeks. The number of local campaigns held in the United States of which the Children's Bureau afterwards received authentic reports was 2,100. Requests for pamphlets and directions as to how to hold a baby week came to the bureau from 4,234 communities. Just what proportion of these inquiries actually resulted in celebrations can not be estimated. After baby week the bureau sent to each of the communities with which there had been correspondence a special request for a report on the local celebration. Less than one-half of these replied, but these replies and authentic reports received from other sources gave the bureau a record of 2,100 celebrations. Indefinite reports, too vague to list, indicate that this number is far below the total.

Campaigns were reported from every State, as is shown in the frontispiece map and in the following statement:

State.	Number of communities reporting a baby-week campaign.	State.	Number of communities reporting a baby-week campaign.
United States.....	2, 100	Montana.....	17
Alabama.....	30	Nebraska.....	129
Arizona.....	5	Nevada.....	8
Arkansas.....	43	New Hampshire.....	17
California.....	34	New Jersey.....	42
Colorado.....	12	New Mexico.....	10
Connecticut.....	11	New York.....	64
Delaware.....	4	North Carolina.....	15
District of Columbia.....	1	North Dakota.....	60
Florida.....	18	Ohio.....	64
Georgia.....	53	Oklahoma.....	15
Idaho.....	12	Oregon.....	8
Illinois.....	71	Pennsylvania.....	82
Indiana.....	35	Rhode Island.....	22
Iowa.....	75	South Carolina.....	23
Kansas.....	425	South Dakota.....	16
Kentucky.....	29	Tennessee.....	36
Louisiana.....	48	Texas.....	115
Maine.....	15	Utah.....	12
Maryland.....	6	Vermont.....	30
Massachusetts.....	47	Virginia.....	6
Michigan.....	42	Washington.....	53
Minnesota.....	26	West Virginia.....	13
Mississippi.....	15	Wisconsin.....	83
Missouri.....	83	Wyoming.....	20

The names of the communities reporting celebrations of baby week are given in a list in the appendix, pages 101 to 108.

Of the 50 cities in the United States which are recorded in the census of 1910 as having a population of 100,000 or over, only 3 failed to report celebrations. Nearly 700 of the celebrations took place in small villages or rural districts. The idea was adopted in a few instances even in territory outside the limits of the United States; three campaigns were reported from Canada and one from the Isle of Pines, West Indies. Rumors, but no definite reports, were received about a baby week in Alaska, and a detailed report came from Honolulu.

Much that is interesting and picturesque is reported from remote communities, and the baby-week idea found an eager response everywhere. The Indian reservations held their baby weeks. In Colorado a town 40 miles from the railroad celebrated; in California one in the middle of the desert. One mother brought her two children on an all-night journey to the conference in a Pacific coast city. A report of the successful celebration in Honolulu says: "We were

afraid no Orientals would enter their babies, but they did." And the report goes on to tell of the great interest of the native mothers after they once understood the meaning of the celebration.

Most interesting of all the reports are those from places where one person or a small group of persons has worked against great odds to make a community see the value of baby week and has succeeded in stirring a genuine interest and holding a successful celebration. From one such town on the Pacific coast comes the record of a modest celebration whose promoter, fully conscious of its shortcomings, adds: "Next year we hope to have a baby week *right*." In one northern New York town a dauntless woman initiated the idea and carried it through practically without help and against great odds because of bad weather. Bad weather and illness on the part of the committee members were frequent obstacles triumphantly overcome. One California town with a favorable climate and a negligible baby death rate showed a praiseworthy modesty, appreciating the fact that there was much to be learned about infant welfare, and held a baby week which was well attended. Towns where the one logical obstacle to a celebration existed, namely, a shortage of babies, held celebrations nevertheless for all children under school age. In two or three towns where it was impossible to find people to undertake committee work involving time, simple but effective campaigns were made merely by securing and distributing leaflets. This method of awakening interest will doubtless bear fruit another year. A South Dakota town holds the record for speed; work started on a Wednesday, and the celebration began on Saturday of the same week.

Probably the most remarkable example of a baby week held under difficulties was a campaign which was launched and carried through by a tuberculosis patient in a Tennessee mountain town. She secured literature from the State health department and several of the national organizations and left it for distribution in the two stores of the town, where posters advertised the church and school meetings she had arranged. She furthermore helped two other towns—one by providing a speaker, and the other by donating the leaflets which were left over from the campaign in her own town.

Two closely adjoining towns in New Jersey, with a large industrial population and varied races, solved the problem of mixed elements in the community by a plan so simple and yet so unusual that it deserves special mention. They arranged a joint celebration, and their original program was the comprehensive and fairly elaborate one appropriate for a community of 30,000. A month later an exhibit went out in search of those people who had not come to see it when it was shown in the high school or in a window in the shopping district. For a week this exhibit was held in the heart of the

most congested district, and the committee reports that it thus succeeded in interesting many people whom even the visiting nurses had before been unable to reach. Later the exhibit was shown at the different schools in turn. Local doctors were also enlisted to help with the examination of babies.

Altogether the experiment of 1916 goes to show that there is no community too large or too small, too remote or too indifferent, for its smallest citizens to reap the benefits of a baby-week campaign.

Plans for 1917.

Baby week has been the means of launching so much of permanent good to the baby, it has proved so unexpectedly popular everywhere, and at the same time it has so generally aroused a determination to regard the 1916 baby week as only a beginning, that the General Federation of Women's Clubs and the Children's Bureau have decided to advocate a similar celebration in 1917. Not all of the 2,100 communities reporting a baby-week campaign in 1916 may find it wise to repeat the celebration in 1917; but the United States includes 14,186 incorporated cities, towns, and villages, and it is doubtful if among the thousands which have never had a baby day or baby week there is a single town or village which would not profit from such a campaign.

New and interesting features of baby-week celebrations reported from various communities are briefly described in the following pages. They are given merely as examples, suggestive for those who are preparing a campaign. It has been impossible to mention all the good campaigns reported to the Children's Bureau.

TYPICAL LOCAL CAMPAIGNS.

Organization.

The local initiative in organizing baby weeks usually came from the women's organizations, although where baby-saving societies were already well established these often took the first step. In one town that had no club nor organization whatsoever to initiate the campaign, a group of individuals simply came together and formed themselves into a committee. Occasionally, as has been said, it was one woman in a town who put through a program successfully.

The importance of cooperation was generally recognized, and the following statement from the report on a suburban baby week is typical:¹

Our baby week was quite successful. The best feature was, I think, the spirit with which the community as a whole entered into it and did their part—

¹ Many of the quoted reports have been slightly changed or condensed.

the churches, the doctors, schools, stores, and private individuals, both rich and poor, young and old. This is an unusual feature in this locality, where the general spirit is not always cooperative.

COST.

Expenses varied all the way from about \$4,000 spent by one middle western city to 35 cents spent by a southern village, \$2 spent by a Pacific coast town, and nothing at all spent for a baby week which had an enthusiastic constituency from both city and country.

Many campaigns were paid for in part or altogether by public funds. In South Carolina the State board of health contributed \$100 toward the campaign. The city of Los Angeles, Cal., subscribed \$500 toward the expenses of its celebration, and the county of Los Angeles appropriated \$1,000 more; private subscriptions brought the total a few dollars higher. In Sioux Falls, S. Dak., the city commissioners and county commissioners appropriated \$200 toward the celebration, the remainder coming from club contributions and benefit performances. The San Francisco committee received \$250 from the city. In Miami, Fla., the city council made a contribution, and in Salem, N. J., the city council gave \$25. Elsewhere the local health department not uncommonly contributed service, material, or money to the campaign.

Some committees were so successful in raising money that after they had paid the expense of the celebration they still had a good sum remaining with which to launch permanent work.

Campaigns in small towns and rural districts.

Small towns displayed even more ingenuity than the larger towns and cities in planning inexpensive devices and arranging programs which contained all the pith and value of the national idea without overtaxing the resources of the community. The reports from small towns in different parts of the country admirably illustrate the possibilities of baby week for small communities. From North Dakota, for example, comes the following:

BABY DAY IN A SCHOOLHOUSE.

We certainly observed baby week in our township. As you know, we are a rural club and only a dozen strong. We all live in or near school district No. 4; but most of the babies of our township are in district No. 2, so we held the examination of babies there. Our local editor gave us space for notices for five weeks before this. The school board let us have the schoolhouse and fuel free, and the merchants in town gave everything we needed from boards to safety pins. The arrangement committee loaded themselves and stuff on two spring wagons and drove up Saturday morning. The Methodist Church loaned us their Sunday-school screens. We used one-third of the schoolroom lengthwise

for the examination and clerks' rooms and left the seats as they were in the rest for the folks who might come.

We had white curtains, with green paper festooning and paper roses at the top. We put posters on the outside of the screen and over the side of the blackboards. The booklets we put on a stand and told folks to help themselves.

There were 27 babies in the township, from 6 months to 3½ years. Many people came to see it all, and 13 children were entered. The highest score was 98½ per cent and the lowest 83 per cent. Our three local doctors from town gave us the afternoon and we had one nurse in the township who helped. The doctors had never seen a scoring before and were much interested. Our clubs sent out invitations to the parents a week beforehand.

While the meeting was not large, we know it was a good beginning. The roads were a cross between snow banks and lakes, so we look for a better crowd next fall.

In our own corner we will use schoolhouse No. 4 for a social center this summer. Will have flower gardens for the children and are planning an open-air theater. The children will have a story hour once a week, and the evening of that day we are free to take our families and supper to the schoolhouse.

We have the Federation Magazine. If any other rural club thinks it can not hold a baby examination refer them to us. for it wakes up a township better than a presidential election.

The report from a New York town shows how committee work may be divided when one person takes the initiative. The writer is the president of the Women's Civic Improvement League.

GETTING READY FOR BABY WEEK.

First, I appointed a special baby-week celebration committee of five of my club members and drafted a tentative plan for the committee to use as a basis for its work.

One member of the committee was responsible for the press or publicity campaign. We sent to the Children's Bureau for material to use in this work. Another member was responsible for the musical part of the special Friday afternoon celebration. Two members looked after getting the merchants to decorate their windows. Two looked after securing speakers.

We asked the merchants to have windows decorated with baby things all the week. They responded enthusiastically.

THE CELEBRATION.

In the school two physicians gave talks on what the brothers and sisters could do for the little baby; this in the grades.

In the churches the ministers responded readily to our request that they preach on the subject of the baby.

On Friday, March 10, we had a special celebration at 3 p. m., open to all women of the village. We had some good music—singing by 10 tiny girls and lullabies by two of our best soloists; recitations, as a bit of humor, about the baby; two splendid talks by local physicians, one on the expectant mother and the other on the new mother with the new baby. As a member of the child-welfare board I gave a brief explanation of the welfare law and its workings in our county. We had two trained nurses in uniform, who displayed a complete but simple layette and dressed a big doll many times to show young mothers just how the little baby should be dressed; they also showed the simple

remedies and appurtenances of all kinds that should be kept on hand for the baby and mother. The day of this meeting was one of the worst of the winter—sleet and snow and very cold—but we had 200 women present. We gave out quantities of excellent literature on children and their care.

The doctors both had many individual inquiries on the days following the celebration, which showed that attention had been given to what they said.

From the Pacific coast comes the following report of a two-day celebration, showing one of the most carefully worked out programs of the year in a town of 500 inhabitants.

COMMITTEES APPOINTED.

Ours is a small community, comprising about 500 people. We held our first baby-week campaign, combined with a child-welfare exhibit, on March 10 to 12, 1916. The Camp Fire Girls sent invitations to the other organizations of the place to join them in undertaking the campaign. The Rebekas, the Grange, the Ladies' Improvement Club, and the Ladies' Aid Society each responded by appointing one of their members to represent them on a central committee. The cradle-roll superintendent of the Sunday school, the local physician, the principal of the school, the local cartoonist, the local editor, and all other people interested enough to attend the meetings completed the membership of this central committee.

SENDING FOR LITERATURE.

In January the guardian of the Camp Fire Girls sent for the publications of the Children's Bureau on baby-week campaigns and child-welfare exhibits and followed this up with letters asking for advice or literature from the following: State superintendent of public instruction, the Children's Orthopedic Hospital of Seattle, the Washington State Board of Health, the State federation of women's clubs, the children's department of the Seattle Public Library, the extension departments of the State university and the State college, State Sunday-school workers, and the three Federal agencies—Bureau of Education, Children's Bureau, and the Department of Agriculture. A good supply of literature was received for distribution. The Department of Agriculture sent 50 of the following bulletins, which applied especially to the rural conditions of this vicinity: Nos. 480, 463, 478, 255, 393, 375, 359, 607, 608, 602, 363, 563, 679, 444, 377, 256, 526, 170, 535, 432. and 182.

SURVEY, EXHIBITS, AND CONFERENCE.

The Camp Fire Girls made a survey of the children in the community, enlarging the term "babies" to include all children not old enough to go to school. Fifty-two were reported.

Next came the assigning of exhibits to the different organizations.

The Ladies' Improvement Club assisted the local physician in undertaking the baby-health conference. Appointments for examinations of the babies were made by the club and circulated by the school children. In response to these appointments the mothers brought the babies from long distances and seemed glad to have the opportunity of knowing more about their babies' physical condition. The score card, without the contest, seemed especially attractive to the mothers. Twenty-one children were examined, the large majority of whom proved to be healthy country children, although several cases of adenoids were reported.

The Ladies' Aid Society was responsible for exhibiting the meals for one day for a child from 2 to 4 years old. One of the Camp Fire Girls made an exhibit of a glass of milk and its equivalents in other foods. The class in animal husbandry at the school performed the test for fat in milk, which proved very interesting to the adults.

The Rebekas took charge of the playroom and had an exhibit of good and bad toys. These proved especially attractive to the country children, who do not have the toy departments of the large city stores to stimulate their imagination. A long panel for decorating children's rooms was labeled "Children's Pictures for Children—Teach children through pictures," and consisted of an attractive row of colored magazine pictures of children and their interests.

The Camp Fire Girls had two dolls dressed to represent babies properly clothed for winter and summer, together with a trained-nurse doll. Besides this exhibit, two of the Camp Fire Girls presided over the homes of Mrs. Do Care and Mrs. Don't Care. They dressed the parts and had all their doll furniture properly fitted up, and fitting pictures on the wall. The neatly set table and the doll carriage screened with fly netting were in sharp contrast to the dirty table and the doll unprotected in the other carriage.

Along with this, the Grange had an exhibit of Mrs. Do Care's **THRIFTY MARKET BASKET** and Mrs. Don't Care's **THOUGHTLESS MARKET BASKET**. These were compiled from the table of food values sent out from Pullman, and were made up of the usual amounts bought at the store. The thrifty market basket cost \$1.86 and contained 532 protein grams and 16,913 calories, these foods being one 16-ounce loaf of homemade bread, 1 pound corn meal, 1 pound oatmeal, 1 pound raisins, 1 pound prunes, 1 package dates, 2 pounds fresh peaches, 1 quart milk, $\frac{1}{2}$ pound butter, $\frac{1}{2}$ pound cheese, $\frac{1}{2}$ dozen eggs, 1 pound potatoes, 1 pound navy beans, 1 pound carrots, 1 pound veal shoulder, 1 pound lamb loin, $\frac{1}{2}$ pound sugar, $\frac{1}{2}$ pound peanuts, and $\frac{1}{2}$ pound cocoa. The thoughtless market basket cost \$1.90 and contained 135 protein grams and 4,382 calories, or one-fourth as much food as the other basket at a cost of 4 cents more. In this basket were 2 packages prepared cereal, 1 dozen oranges, 1 can peaches, $\frac{1}{2}$ pound tea, $\frac{1}{2}$ pound coffee, 1 can tomatoes, 1 can dried beef, 1 half-pint jar pickles.

The bulletin desk was presided over by the guardian and some of the Camp Fire Girls, and was an exhibit in itself.

FORTY POSTERS AT SMALL COST.

The main part of the exhibit was made up of 40 posters prepared by the Camp Fire guardian. The rubber stamping outfit of the school was used, and a roll of butcher's paper 20 inches wide was secured. The posters varied from 3 to 4 feet in length and were illustrated with magazine pictures, photographs, copies of cartoons, and striking phrases printed in large type. A few cartoons were made by the local artists; among these were: How High is the Wall in Our Town? Is Your Farm Like This or This? and Adenoids and Their Effect.

The posters dealt with general information about baby week and about the Children's Bureau; the baby-health conference and the benefit of physical examination; contagious diseases, flies, typhoid, milk, teeth, general health; patent medicines and other fake cures; children's books, and books on story telling for mothers, and the older child's good and poor books; the Children's Bureau publications, Prenatal Care and Infant Care. A pad was provided for the signatures of mothers desiring to secure these last two bulletins.

INFORMAL TALKS AND DISCUSSIONS.

The baby-week program and the child-welfare exhibit were held at the school-house, the exhibit being open Friday evening, all day Saturday, and Sunday afternoon. The program Friday evening consisted of a talk on milk and teeth by the local physician, a talk by the local lawyer on the State laws as they affect the homes and the children in the homes, especially birth-registration and quarantine laws, and then a talk on the What, Why, and How of Story Telling by the local primary teacher.

The cradle-roll program for Baby Sunday was held at the church, and six questions given out to the parents the week before were discussed by them at this meeting. The questions had to do with problems of child life that puzzle all mothers and educators. The primary department had a special song, and there was special music throughout the service.

It is felt that the very newness of such work in a rural community is something of a handicap in itself. While much was accomplished by this first attempt, it has opened the way for similar work along still broader lines.

TOTAL EXPENSES, TWO DOLLARS.

Our expense account of \$2 was apportioned as follows: Butcher's paper, 25 cents; postage, 75 cents; and freight on the educational charts loaned by the State superintendent of instruction, \$1. Butcher's paper is cheap, and a good color, and heavy enough so that it does not curl easily. There were several advantages in using the paper on one long roll, as we could use different lengths easily. We used the photographs in the pamphlet on exhibits to illustrate our posters, and other similar photographs were taken from other publications.

COMMUNITY NEEDS AND GENERAL RESULTS.

We feel that the danger from contagious diseases, the need of a strict quarantine, the danger from flies, bad milk, unclean stables, and bad farm sanitation need publicity in rural communities. Our whole county does not boast of one kindergarten, and the idea of the value of play for children, both young and older, is very poorly understood. A popular proverb in these parts is, "Only babies and monkeys need amusing." It was very interesting to see the play-hungry children hover over the toy exhibit and to watch them as they listened to the primary teacher tell them stories. The average farm mother has so much to do that she often feels she has not time to tell stories to the children, feeling that their undirected outdoor play should suffice.

The older people of the community were apt to be skeptical about this new campaign, thinking that country children were so much healthier than city children that there was no need of a campaign on their behalf. The examination of the babies proved that they did rank very high, but adenoids and other troubles presented themselves from time to time. The young mothers who brought their children seemed so interested, and so frankly acknowledged the helpfulness of the work, that it seemed altogether worth while.

From a small town in Wisconsin, where much preliminary work needed to be done to stir the people's interest, comes this report of work courageously undertaken:

A city federation has been organized here and we have started the better-baby campaign, March 5 to 11.

We only had a committee of seven and no funds to work with, but we had free use of the newspapers, and our posters one lady kindly had printed at her own expense. Each of our churches had a Baby Sunday. The merchants decorated their windows. A local doctor gave a talk to mothers in each ward school and the program was furnished by the children. One ward had music.

Now we are having community singing in the high school to get the fathers and mothers both out, singing old songs, which are proving very popular, and everyone seems to enjoy the singing, the second meeting calling a larger crowd than the first.

We are also getting the mothers out evenings, a ward at a time, and have talks, music, little stories played out by the children, and serve light refreshments. We are going to work to get a visiting nurse now.

In Illinois a successful baby week was carried on by a club of farm women covering seven school districts. As a result of their work together, they plan to secure medical inspection of the schools and a school nurse. From a rural district in the State of Washington, comprising but 40 families, comes the report of a successful program. This community was represented by two or three clubs of a dozen members each, whose members lived sometimes 4 miles apart.

The report from a North Carolina mill town tells of a baby week which consisted of meetings for the mill mothers. The women were enthusiastic and wanted a club started. Although this town held one of the least expensive campaigns—they spent in all 35 cents—the results of their enterprise bid fair to rank on the list of significant achievements, for they plan to acquire both medical inspection and a district nurse.

County campaigns.

Under some circumstances the county, or a section of the county, rather than the town proved the logical unit in working out the baby-week celebration. For example, in several Pennsylvania counties the county organization of the civics department of the State federation of women's clubs, with the assistance of the county medical society, the county organization of the W. C. T. U., and other agencies, organized campaigns on county lines. Sometimes, as in northern Westchester County, N. Y., the field of activity of the local organization—in this case the Visiting Nurse Association—was a section of the county. The great advantage of the county unit was that one exhibit served in rotation for a series of towns.

A slightly different form of county organization was that in which the small rural towns acted as feeders for the main celebration which was held in the county seat or main town. From Memphis, Tenn., comes an unusual report, showing how the celebration in a city may be participated in by the whole countryside:

The baby-week campaign in Shelby County was promoted by the Nineteenth Century Club and the Bureau of Farm Development, and it is a pleasure to report a campaign unique in several ways. First. The promoters secured the

cooperation of all organized bodies of Memphis and Shelby County, both men and women, the general committee being composed of one representative from each organization. Second. It was not just a city campaign but was county-wide, 16 lecture centers were selected in the county and 3 in the city, and a general exhibit was held in Memphis. The women's clubs acted as hostesses at this general exhibit. Third. The campaign, which was fed by 16 rural centers, did not cost one cent, not even the expense of a postage stamp. The men in Memphis responded as enthusiastically as the women. One of the most interesting examples of the result of this spirit of cooperation was the large banner which was hung across the principal street. One man gave the canvas for the banner; another man took care of the printing; another man attended to the eyelets; a fourth furnished the rope; and still another placed the banner in position. Of course, the headquarters was offered free to the committee. One business concern furnished the ice, another the coal, and even the laundry work was taken care of without any expense to the committee. Our slogan, "Cooperation and Service," was carried out from start to finish.

The main exhibit hall was open for one week and the attendance was over 15,000; 50,000 bulletins were distributed and 400 babies were examined at clinics. The exhibit was solely an educational one, and three lectures each day were given. All stores throughout city and county displayed baby windows and used their daily newspaper space to advertise the baby week.

Baby day was very successful in all the rural cooperative clubs of Shelby County, with lectures and baby parades. The inclosed pictures may give you an idea of how they cooperated with the city exhibits by running baby specials for the baby clinics. (See illus. No. 2.)

From the Shelby County Cooperative Club come suggestions for a program which any grange would find suitable:

1. Each member to answer roll call with a good idea for the care of babies.
2. How can this community better its conditions for babies?
3. Report on sanitary conditions of the community which affect babies.
4. Baby foes.
5. What do the school and the community offer in the way of playgrounds?
6. What does the community offer in the way of libraries?

The next report shows what was done in an enterprising Alabama county:

ONE-DAY CELEBRATION AT THE COURTHOUSE.

Our first baby day was held in Centerville, Bibb County, Ala. It was an enthusiastic day for the better-baby cause. We posted our town with hand-made posters made of baby pictures and printed with crayons. We decorated the courthouse, where the speaking was held, darkened it as best we could and had magic lantern scenes and fine lectures on birth registration and talks by the president of the county medical association, before noon. Then a delightful dinner was served on the courthouse lawn by the ladies of the town to everyone present.

AUTOMOBILE RIDE, LECTURES, AND EXAMINATION OF BABIES.

As soon as dinner was over all of the mothers and babies were taken to ride in automobiles decorated with big pompons of baby colors in crêpe paper

and pennants, "Save the kiddies" and "Save the babies." This ride was thoroughly enjoyed.

After the ride the main lecture of the day was delivered by a baby specialist, but before he spoke two of the Bibb County High School boys made fine speeches on screening and sanitation. In the afternoon addresses were delivered to a packed house. The program for the whole day was fine. It was educational throughout and delivered with enthusiastic spirit.

I gave the 100 small pennants, "Save the kiddies," to mothers only, and I should say that we had 108 or 110 mothers, as my pennants gave out before I got around to all. On the bulletin board in the courthouse the county health officer wrote out the record of 44 babies examined. Counting out two schools who were present in full in the afternoon, I should say we had 600 present.

HELP FROM EVERYONE.

The three churches helped with the preparations. The Boy Scouts and the Bibb County High School helped wonderfully. They deserve praise. The boys made the screened bed and helped all they could with the decorations, running errands, etc.

We had no infant-welfare exhibit because we were too late in applying for one, but we had demonstrations of washing and dressing a baby and in preparing its food.

We gave no plays to raise money; the citizens and doctors of the county paid the bills, amounting to \$34, and they did it gladly.

FOLLOW-UP WORK AND ITS EFFECT ON THE COUNTY.

As follow-up work we plan perfect birth registration in Bibb County and two added laws requiring that our girls shall be taught by domestic-science teachers the preparation of baby foods and have lectures during the school year on infant and child welfare by physicians, nurses, and teachers; also the continuation of the present health program by doctors. This follow-up work, just mentioned, we are getting in shape now.

We are going to have another baby day at Marvel, Ala., in Bibb County, in about a week. We are going to saturate Bibb County with the good-health and better-baby idea. And it may be that Blocton, in this county, will also have a baby day.

I only wish that the great success of our baby day would be an incentive to other places to hold such meetings as we have had.

The following description of the celebration held at Tuskegee, Ala., under the auspices of the Women's Club of the Tuskegee Normal and Industrial Institute, illustrates again how invaluable the celebration in a town may be to the countryside.

We closed our campaign feeling sure that we had accomplished our purpose. The whole town is interested in babies. We have shown the people the need of better homes and better mothers and that, having these, there will develop better communities and citizens. Our slogan was "Better babies, better mothers, and a better community." We planned not only to help our own community but to send out groups to the rural communities near by. The teachers in these communities were the Tuskegee Normal and Industrial Institute graduates. We had from the beginning their sympathy and support. Each of these places was visited early in February and the teachers advised

as to the time and kind of meetings we wished to hold. We went as far as 10 miles to hold meetings. We sent the plans for the campaign to places in Mississippi and to a high school in Coosa County, Ala.

We had no money for the campaign and the time was short. We began the preparations in February. Everything needed was donated, from a nail to an automobile, and the women of the club gave their services. The Handicrafters' Club gave a white banner with "Better babies" in blue letters. The Mothers' Improvement Club, of the children's house, gave two bolts of ribbon. The Mothers' Club of the town of Tuskegee helped; all the departments of the school contributed to the campaign; the students were anxious to help and worked early and late. We had to present the club with a bill of only \$4.

On Sunday at the Institute the preaching service was excellent and set the keynote for the whole week; there was a woman's meeting at 2 p. m. At the same hour meetings were held for little girls, for men, and for little boys, all of which were good. Our chaplain, the Y. M. C. A. secretary, two doctors, and a trained nurse had charge of these. The Sunday-school service and cradle roll were held in three Greenwood churches in charge of ministers teaching in the Bible-training school. They each had a mother and some young women teachers to help. Preparedness for parenthood, and better children, morally, physically, and mentally, were the topics on Sunday, and they were so forcibly presented that all were impressed.

The ladies that went into the country carried nurses with them; the nurses gave demonstrations of how a baby should be bathed, and the ladies spoke of the need of preparing for motherhood and how women were looking at this subject to-day. You know in these places we meet the dear old-time nurses and they know they did their work well; these very women could see the need of the young women being taught and were deeply interested. We carried some literature, which was gratefully received. The best meetings were at Harris Barrett School and at Baldwin Farms. Our former head nurse carried a party out to the latter place. It was a very cold day and they had the wind in their faces all the way. The drive was 10 miles.

Our parade was a great success. It brought the family to the front and every man was proud of his wife and babies. I would recommend a parade for any campaign, if the community is a healthful one; the effect is inspiring. We had seven grades of the public school marching with placards on poles, saying "Don't kiss the baby," "Keep the flies off the baby," "Give the baby a drink of water," etc. We had the school band and an escort of officers from the battalion. A large national flag was carried and a banner of white with "Better babies" in blue; the banner was carried by a large boy and the ribbons held by four small girls. Then came the autos full of mothers and babies; the last two were an auto and autotruck full of kindergarten children; all the autos were decorated.

Having no place for an exhibit all the week, we took only one feature and that was foods. The head nurse from our hospital, assisted by four senior nurses, showed the right amount of milk to give a baby, and how to prepare it, and the daily meals for children from 1 to 3 years; we used placards to emphasize the feeding of the baby at this meeting; appropriate music was sung. This was Friday night. The Theft of Thistledown was most beautifully rendered Saturday night. We introduced a lot of fairies dressed in different colors trimmed with tinsel and stars; these fairies were trained to do different group dances and a solo dance for the amusement of the queen; we had two pieces of orchestra music, a short address, and then the play. The lesson of the play was well understood.

We had the support of a physician, who spoke at the school and went out in the country twice; he is deeply interested in this work, as we all are here at the institute; much good work has been done along all health lines.

Our babies are truly better babies.

Campaigns in large cities.

The following report of baby week in Boston, held under the auspices of the Boston City Federation of Women's Clubs, gives a good example of the decentralized method of handling the campaign, which apparently has proved most successful in large cities. Baby week in Boston is also an example of the fact that in a city where satisfactory baby-welfare work has been carried on for years the people actually engaged in these activities may well form the nucleus of the baby-week committees:

Nine of the 11 districts comprising Boston proper took part in the national baby-week campaign, March 4 to 11, 1916. These districts were: Boston, Central, South End, and North and West Ends; Charlestown; Dorchester; East Boston; Hyde Park; Jamaica Plain; Roxbury; South Boston; West Roxbury.

In Boston proper over 40 organizations cooperated; in Charlestown, 6; in Dorchester, 24; in East Boston, 10; in Hyde Park, 3; in Jamaica Plain, 3; in Roxbury, 14; in South Boston, 7; and in West Roxbury, 7.

Two hundred and fifty people served on the various campaign committees—23 in Boston proper; 35 in Charlestown; 75 in Dorchester; 50 in East Boston; 5 in Hyde Park; 8 in Jamaica Plain; 13 in Roxbury; 26 in South Boston; and 15 in West Roxbury.

The week's program comprised baby-welfare exhibits and talks at three department stores; some of these talks were illustrated with stereopticon slides, and all were followed by questions. There were public meetings at Ford Hall, Tremont Temple, and the public library. Child-welfare and public-health motion pictures were given at some of the motion-picture theaters. The baby button was sold on the streets, in hotels, and in stores. Groups from some districts were escorted to the central exhibits with interpreters. Large posters, flags, and literature were distributed in many neighborhoods. There were window exhibits in department and drug stores. A play was given in two districts (Roxbury and East Boston); fathers' day was celebrated in one district (Roxbury). A baby conference was held in one district (Dorchester). The Milk and Baby Hygiene Association gave special talks and refreshments at its regular conferences. Altogether there were 107 meetings and talks—81 in Boston proper; 4 in Charlestown; 9 in Dorchester; 1 in East Boston; 2 in Hyde Park; 2 in Jamaica Plain; 5 in Roxbury; 1 in South Boston; and 2 in West Roxbury.

The following subjects were discussed at the meetings and talks: The meaning of baby week; prenatal care; care of the child at birth; care of the young child; public-health nurse; care of the mother before and at childbirth; relation of good housing, clean streets, and flies to baby welfare; relation of alcohol to baby welfare; recognition and prevention of contagious diseases in infancy; care of eyes, ears, nose, mouth, and skin of babies; mental training of young children; clean milk; birth registration.

Approximately 15,490 people attended the meetings and talks—10,870 in Boston proper; 429 in Charlestown; 1,260 in Dorchester; 250 in East Boston; 800 in Hyde Park; 65 in Jamaica Plain; 800 in Roxbury; 600 in South Boston; and 425 in West Roxbury.

Exhibits were loaned by the Massachusetts State Department of Health, Massachusetts Commission for the Blind, Boston City Board of Health, Tufts College Medical School, Infants' Hospital, Instructive District Nursing Association (loaned in triplicate), Women's Municipal League, Milk and Baby Hygiene Association, and Scientific Temperance Federation. These exhibits required 18,780 square feet of wall space and 1,731 square feet of floor space. In addition to these exhibits, which were in three department stores in Boston proper, nearly all the districts had exhibits, at meetings and in stores, of correct baby clothing, etc., and of appliances for feeding and bathing the baby. Roxbury devoted one room at the Norfolk House Center to this class of exhibits, with the addition of pictures of bathing, clothing, etc.

A children's meeting at the Bowdoin Square Theater was arranged for the first morning of baby week. Nearly 2,000 children attended, and enjoyed motion pictures and baby-welfare and public-health plays. The children retained their tickets of admission, upon the backs of which were printed the program for the ensuing week. Two plays were presented: Zona Gale's play, *Neighbors*, was given by the East Boston Home Club at one of its meetings, and at one of the Roxbury meetings was presented *The Theft of Thistledown*.

In addition to those mentioned above, baby-welfare and public-health motion pictures were given at meetings in Dorchester, Hyde Park, and South Boston. Demonstrations of dressing and bathing the baby were given in connection with all the exhibits.

Baby Sabbath and Baby Sunday were very generally marked by notices of baby week being read from the pulpits, with, in many cases, additional remarks by the officiating ministers. The opening day of baby week was celebrated as button day, and baby buttons were sold throughout the city, in the streets, hotels, and stores. Flag day, marked by the display of a flag in each house containing a baby under 1 year of age, was celebrated in East Boston. A fathers' day with a special meeting was celebrated in Roxbury.

Publicity was obtained through the newspapers, as well as through posters, flyers, and programs. Press notices were given by all the Boston Sunday and daily papers, including the Italian and Polish papers; and by the local papers in Charlestown, Dorchester, East Boston (including Jewish and Italian), Hyde Park, Jamaica Plain, and South Boston.

A baby-health conference was held in one district, Roxbury, at which 35 babies were examined.

No special printed matter was issued except the programs, flyers, posters, and tickets, but a great many copies of pamphlets were distributed. These pamphlets were Children's Bureau bulletins, Massachusetts State Department of Health pamphlets, Boston City Board of Health pamphlets (in four languages), Women's Municipal League pamphlets, Metropolitan Life Insurance Co.'s pamphlets (in four languages), and Milk and Baby Hygiene Association and Instructive District Nursing Association cards.

The hall of the Charlestown School Center was decorated with baby pictures loaned by the Boston Public Library.

The approximate expense of baby week in Boston was \$764.24, divided as follows: Boston proper, \$636.04; Charlestown, \$4.20; Dorchester, \$34.25; East Boston, \$19; Hyde Park, \$15; Jamaica Plain, \$15; Roxbury, \$15.75; South Boston, \$15; and West Roxbury, \$10.

Plans for follow-up work to promote baby welfare include intensive work along the lines already existing. In addition, Roxbury plans to hand the diagnosis of each child made by the doctors in charge of the baby conference to the neighborhood houses in whose district the child lives, for follow-up work. And South Boston has some publicity plans under way for April.

The following account of the baby week held in Rockford, Ill., illustrates organization, committees, publicity, etc., for a city celebration carried out as a single unit. Rockford has a population of about 45,000, according to the Federal census of 1910.

Plans for Rockford's baby-week campaign were initiated by the woman's club, acting through its president and the chairman of its child-welfare committee. In their names, invitations for a preliminary meeting were sent to all the organizations in the city most likely to be interested in the project, including the city administration, represented by the mayor and the health commissioner, the county medical society, the city hospital, visiting nurses, public-welfare bureau, ministers' union, newspapers, chamber of commerce, superintendent of schools, all representative women's clubs, parent-teachers' associations, etc. The 40 invitations issued brought 40 acceptances, and the preliminary meeting, which took the form of a luncheon, developed much enthusiasm. Here temporary organization was effected, the president of the woman's club being chosen temporary chairman and empowered to appoint an executive committee to which all details of the enterprise should be intrusted.

The membership of this committee included the president of the woman's club, the president of the county medical society, the health commissioner, the superintendent of the city hospital, a professor of physiology from Rockford College, the superintendent of schools, and a representative each from the chamber of commerce (whose secretary also served on the committee), the ministers' union, and the four representative women's clubs. Chairmen of committees were appointed as follows:

Exhibits, the professor of physiology in Rockford College.

Finance, the health commissioner.

Education and publicity, the president of the county medical society.

Sunday observance, a member of the ministers' union.

Demonstration and mothers' conferences, the superintendent of the city hospital.

Building, a member of the chamber of commerce.

Beginning three weeks before the 4th of March daily articles concerning the purposes and import of baby week or dealing with one or another neglected phase of the care of the baby, were printed in the three local papers and continued up to the time of the opening of the exhibit. In addition one comprehensive article each was sent to the Swedish and German weeklies and to all the immediately adjoining country papers.

The actual observance of baby week began on the 5th, with addresses from the various pulpits. On Monday, Tuesday, and Wednesday the Boy Scouts carried a United States flag into every home in the city where there was a baby under 1 year old whose birth had been registered. With the flag a pamphlet on the care of the baby was sent into every English-speaking home and a leaflet, locally prepared and printed in English, Swedish, Polish, and Italian, into every home where one of these languages was spoken. Inserted in these was an invitation to the baby-welfare exhibit. Twelve hundred baby buttons, paid for by the physicians and druggists, were given away during the week, and 300 attractive posters were put up about the city. On Tuesday afternoon the executive secretary of the Infant Welfare Association of Chicago delivered an address before the woman's club and its invited guests. Throughout the week the newspapers printed educational articles, fly-pest and birth-registration motion pictures were shown at the local theater houses, and the merchants of the city dressed their windows with baby goods.

The baby-welfare exhibit was formally opened Wednesday evening, with addresses by the mayor, the president of the county medical society, and the superintendent of the city hospital, and there was an attendance of 225 people in the hour and a half during which it was kept open. Evidently all of these 225 turned boosters for the cause, as the attendance increased steadily, reaching its climax on Saturday, when 3,900 visitors were recorded. Numerous requests to keep open at least one more day caused the committee to open the doors again on Sunday noon, and when they closed them at 10 o'clock that evening the attendance for the three and a half days totaled 9,636 people. Mothers' conferences, in charge of the visiting nurses and a committee of doctors, were held each afternoon from 2 until 4 o'clock, and each evening talks were made by physicians in a separate room. Both features proved very popular, and our quarters were inadequate for the people who desired to attend them. Throughout the exhibit trained nurses were constantly on hand to demonstrate and answer questions, and rotary committees from the various women's clubs took charge of the attendance.

The serious and interested attitude of the people visiting the exhibit was particularly impressive. It was an excellent exhibit, broad enough and ingenious enough to appeal to the many kinds of people who viewed it; nevertheless the uniform interest and seriousness with which toothless grandmothers, young mothers with babies in their arms, high-school boys, solemn husbands innumerable, "little mothers," and small boys regarded it filled us with surprise as well as gratification. The thing was an astonishing success, and it was a success because the people welcomed it eagerly.

Our expenditures amounted to \$356.57. They were kept down to this very low figure by our success in getting all the work done by volunteers. Experts were chosen to head each committee, the best resources of the city being freely drawn upon. The wall panels were designed and executed entirely without cost, the necessary research work and the lettering and sketching being done by volunteers; the Rockford leaflet was written by local physicians and translated into three languages by local priests; all secretarial work was done without charge, and the use of the rooms in which the exhibit was held was given by the W. C. T. U. The exhibit consisted of electrical devices loaned by the State, still models, wall panels, cartoons, three-dimension exhibits, and living demonstrations.

Follow-up work to be done this year will include:

A committee that will endeavor to have the State law in regard to birth registration enforced and will mail a Rockford leaflet to each new baby whose birth is registered.

A committee to investigate and make recommendations concerning Rockford's midwife problem.

The establishment of a permanent baby-saving station in the most crowded part of the city, where mothers' conferences, in charge of a doctor and the visiting nurses, will be held regularly throughout the year. Plans for this are already advanced, and its establishment is virtually assured.

A committee to cooperate with the city health department in inspecting the handling of milk in the city.

A few cities have published printed reports of their baby-week campaigns. These include the following:

Greater New York Baby Week, published by the New York Milk Committee, 105 East Twenty-second Street, New York City.

Philadelphia's Baby Week, published by the executive committee of the Philadelphia baby week. Copies may be obtained from the

director of the department of public health and charities, City Hall, Philadelphia, Pa.

Los Angeles Celebration, Nation-Wide Baby Week, published by executive committee nation-wide baby week, Dr. Maud Wilde, chairman, 1437 Calumet Avenue, Los Angeles, Cal.

STATE CAMPAIGNS.

The State agencies most prominent in stimulating local communities to celebrate baby week were the State federations of women's clubs, the State boards or departments of health, and the extension divisions of State universities or agricultural colleges. Frequently other State organizations threw their resources into the work. While there were many successful local campaigns in States where no State-wide plan was developed, the States where two or more agencies worked together and plans were well outlined some time in advance show the largest numbers of uniformly good celebrations.

Governors' proclamations.

In many States the governors issued proclamations. The following is an example:

Through the activity of the Federal Children's Bureau and the General Federation of Women's Clubs great interest has been aroused the country over in the children's welfare movement. In our State many civic organizations and other associations, including the Ohio Federation of Women's Clubs and the Ohio State Board of Health, have given it enthusiastic cooperation and support. The welfare of the child is of the most vital importance to the perpetuity of our Nation and the advancement of our civilization. Infant mortality must be and can be reduced.

In cities of the United States the death rate among infants less than 1 year of age ranges from 70 per 1,000 to 250 per 1,000. That is, in some localities one-fourth of the babies die before they reach the age of 1 year. This frightful loss of life must be reduced; so far as possible, the "slaughter of the innocents" must be stopped.

Careful investigation is convincing to anyone that a large percentage of the infant mortality everywhere could be prevented by more adequate knowledge, more adequate attention to the problems of the morning of life. A high infant mortality rate means to the State and to the Nation pain and sorrow and economic waste that we can and must to a larger degree prevent. Every family, every community, every subdivision of the State, and the State itself is vitally concerned in any movement looking toward the improvement of conditions affecting child life.

It is therefore with a special interest and in hearty cooperation with the Federal Children's Bureau, the Ohio Federation of Women's Clubs, and the Ohio State Board of Health that, as governor of the State of Ohio, I designate the week beginning on March 4, 1916, as baby week, and the date of Friday, March 10, as a special school day in which the consideration of child welfare shall be uppermost in our schools, and I commend to the citizens of Ohio careful consideration of this important problem.

What State federations of women's clubs did.

To the women's organizations of the country belongs the chief credit for the widespread popularity of baby week. In some States a special baby-week chairman was appointed by the State Federation of Women's Clubs. Elsewhere the president of the federation undertook the work, or the State chairman of civics, home economics, or public health was assigned to the baby-week campaign. A valuable service was performed by these State chairmen in gathering information from the Federal Children's Bureau, the State boards of health, and the extension divisions of State universities and agricultural colleges; in giving publicity to the kinds of assistance that were available from the various State agencies; and in writing to individual clubs in different parts of the State and offering suggestions and model programs suited to local conditions.

STATE-WIDE PUBLICITY.

The following letter, circulated in Missouri, illustrates the type of letter sent out by State chairmen to each federated club in a State:

JANUARY 18, 1916.

DEAR MADAM: For the first time in the history of our country the women of the United States are asked by the Government to do a definite thing. The Children's Bureau, Washington, D. C., asks every community in our land to set aside some week this spring for baby week. The week chosen is March 4 to 11. If that week does not suit your local conditions, any other week may be chosen.

In cooperation with the General Federation of Women's Clubs and the American Medical Association this week is to be made national. One hundred million people are to be made to give some thought to the importance of babies. We hope that every house in all our country that can boast a baby under 3 years of age will signify this fact by placing on "the lintel and the two side posts" an American flag. This will say to the world, We have a baby, and we are trying to give it the best we can.

We must not stop with that. It must be made a week of community education on baby welfare. Every phase of baby care and culture must be illustrated and discussed.

Each club willing to devote this week or part of a week to work for the babies of its community should send a letter or postal addressed to the Children's Bureau, Washington, D. C., asking for directions and assistance, which will be sent you free of charge. While you are waiting for this bulletin to come, appoint the following committees: 1, General management; 2, Program; 3, Advertising and publicity; 4, Exhibits; 5, Medical examinations; 6, Window displays of all firms—drugs, groceries, clothing, books, amusements, furniture, etc.

This should be made a community affair, with the club women as leaders. Enlist the cooperation of every club woman in your town. Assign definite things to each organization, and the result will be an educational movement that shall bring much good to the whole community and in particular to the babies.

In New York State, with its many crowded centers of population, this letter of specific suggestions was used:

The following are some suggestions as to the special way that clubs can carry out the baby-week program:

1. Begin at once to secure the interest and cooperation of the public. Make a health survey of conditions in your community (have it ready to report in baby week) in regard to the following points: (a) Birth registration in 1915; were all the babies registered? (b) How many births were attended by midwives? (c) Mortality rate under 1 year; under 5 years? (d) Kind of milk used? Number of breast-fed babies? Any cases of ophthalmia neonatorum or tuberculosis among infants? Any poor health conditions in your city or village?

2. Have a baby exhibit. Secure one from the State if possible. This will not be possible in all places; but in every community a room can be secured and a nurse or intelligent mother put in charge. Into this room put a crib with a big doll in it, dressed as a baby should be. Secure charts and literature—as much as you can. Ask the State department of health for leaflets on prenatal care of mothers, proper care of infants, food, etc. Write to the Children's Bureau, Washington, D. C., and ask it to send helpful literature.

3. Sunday, March 5, have prepared a concise statement of the object of baby week with the location of your baby exhibit, stating what there is for mothers to see and learn. Ask each clergyman in your community to read this to his congregation, and urge the mothers to visit the exhibit.

4. Arrange to have as many lectures given during the week as possible. Start a crusade for a pasteurized milk supply (if you do not have it). Dr. Herman M. Biggs, State health commissioner, approves and strongly recommends the use of pasteurized milk in order to prevent deaths of infants as well as epidemics of typhoid, scarlet fever, and diphtheria.

5. Have a demonstration day. Demonstrate how to prepare foods for babies; how to wash, dress, and care for them in the best way.

6. Have a baby-clinic day. Secure the cooperation of physicians and nurses and give free examinations and advice to all mothers who will bring their babies to the baby exhibit.

7. Study and conference day. Study carefully the results of your health survey and the results of baby week. Confer with all organizations interested in a better community life. By carefully looking over the results, the weakest spots in local health work will become apparent, and by conference with all interested you can plan an effective remedy.

It is the earnest wish of the chairman of the public-health committee that every club in the State should observe baby week. If you can not carry out the entire plan, do as much as possible.

Another State chairman in Missouri sent an attractively printed card to the newspaper editors of the State, which served at once as an announcement and as an effective appeal for help:

TO THE EDITOR.

We need your cooperation in this NATION-WIDE BABY-WEEK Campaign

MARCH 4-11.

You are the **TORCH** that must go into every home and lead the way. Please ask the mayor of your town to issue a proclamation asking the cooperation of every citizen in the movement. **Better Babies means a Better Nation.** It is easier, better, and cheaper to prevent than to cure disease. I thank you for your past cooperation in our civic and health work.

(Signed)

Chairman.

In Mississippi the State federation called on the governor for a proclamation, arranged that news of the campaign be published in every daily paper in the State, and offered a prize for the best slogan.

COOPERATION WITH OTHER STATE ORGANIZATIONS.

The Wisconsin State campaign illustrates how the State federations and other State agencies cooperated. In November a circular letter was sent by the president of the State federation not only to federated clubs but also to interested women in towns where there were no federated clubs urging prompt action and giving the addresses of State organizations which would supply baby-week material and suggesting where speakers might be secured. Later a message on baby week was sent around again through the federation bulletin. Shortly afterwards the president reported:

I have written to various organizations and have received favorable replies promising active cooperation from the State health departments, the university-extension department, the library commission, and the Wisconsin Anti-Tuberculosis Association. They will furnish material and speakers. Probably I shall later receive replies from appeals for cooperation to other organizations.

In many States the chairman of the committee on home economics of the State federation was on the staff of the State agricultural college. This meant especially close cooperation between these two bodies, as in Nebraska, where the chairman, through her double affiliation, reached 200 unfederated women's clubs, of which 30 were rural and one 30 miles from the railroad.

PUBLISHING INFANT MORTALITY FIGURES.

The State chairman in Rhode Island sent out a printed notice devoted to the subject of baby death rates everywhere. With it she inclosed the table of infant mortality in Rhode Island towns,

which the State health department had compiled at the request of the baby-week committee and which supplied excellent arguments for local campaigns. (See p. 44.)

SECURING REPORTS OF LOCAL CAMPAIGNS.

After baby week was over, the State federation officers undertook to secure reports from each community. For example, the following letter, sent out by the State chairman in North Dakota, brought prompt and full answers, which were afterwards published in a special baby-week number of a local magazine:

Baby week in North Dakota has been a glorious success. Just how successful we can not tell until we get in the reports from all the clubs.

Will you please send me by return mail a complete report of everything that took place in your town in honor of baby week. What was the dominant note in the addresses given during the week? Please do not leave out anything; sermons, store decorations, newspaper publicity, exhibits, schools, club news will all be interesting.

I would like very much to have you report by March 17 at the latest. Write me whether you observed the week or not.

What State universities and agricultural colleges did.

Throughout the country the State universities and agricultural colleges gave invaluable aid. Speakers were sent from the faculties of the State universities, and the State agents of the agricultural colleges cooperated in local campaigns by turning attention to the baby's interests in their extension courses, farmers' weeks, and home makers' club work during baby week.

The following examples of the baby-week activities of a few State universities and agricultural colleges are merely typical of many.

The extension service of the University of Nebraska sent an outline of suggestions to 350 clubs. It assisted high-school teachers in preparing school celebrations, and it cooperated with women's clubs in constructing an exhibit which was circulated throughout the State after baby week. In Kansas the State agricultural college cooperated with the division of child hygiene of the State board of health in circulating board of health leaflets and pamphlets. The agricultural college itself prepared two series of slides, with accompanying lectures, which were sent out on circuit to ministers and reached 20 communities. More than 2,200 programs were distributed by the college among Kansas home makers' clubs.

The University of Texas sent baby-week circulars and leaflets to 87 communities and programs for schoolhouse meetings to about 1,500 communities. The Agricultural and Mechanical College of Texas supplied outlines for a baby week in rural communities and sent lecturers to 15 places. A few other State universities, notably

that of Wisconsin, supplied exhibit material, and several issued special pamphlets. The New York State College of Agriculture at Cornell University, for example, published bulletins on the preparation of food for little children, which were distributed at many baby-week exhibits.

The University of California Medical School authorities took an active part in campaigns in near-by communities. The Seattle baby-week exhibit included a model nursery prepared by the University of Washington.

The hearty good will expressed in the following letters from the extension professor of home economics of the Iowa State College and the director of the extension division of the Iowa State University is typical of the interest shown by colleges and universities in many States.

I am most happy to indorse the campaign for baby week. We shall be able to boost for it, since there are eight women on the road all the time. I shall be glad to have posters made and shall place these in every classroom, from now until March 4. This will call the matter to the attention of at least 13,000 women. Each woman in our extension department will be glad to spend some time each week explaining the plan and its purpose.

We shall be able to supply outlines for study and copies of literature on the care of children. You may count upon the most hearty cooperation from each member of our home economics extension staff.

I am glad to have your communication of October 28, relative to the nationwide baby week, March 4 to 11, 1916. This division will be glad to cooperate with the women's clubs of Iowa for this week. We are duplicating our charts so that we now have available several sets of charts dealing with child welfare which can be used that week. Additional charts will be made as rapidly as possible. I hope to double the number of charts that we now have before that time.

The division stands ready to furnish the services of two trained physicians to be of service in this baby week also. Beyond this we have nothing available, owing to our limited amount of money.

The exhibit material, etc., which State universities and agricultural colleges report that they have for lending or for distribution, and the other kinds of assistance which they are prepared to render, are listed in the appendix, page 121.

What State health officers did.

Most of the State health officers saw in the proposed baby week an opportunity for carrying out educational work for infant welfare and promised the help of their departments. Many, however, on account of lack of appropriation, were unable to do very much. One New England health officer, who could not supply material in 1916, writes that he has now acquired exhibits, slides, and printed matter

for distribution and is ready to help. Doubtless with others the situation is similar.

Members of the State boards or departments of health offered their services as lecturers in many places. Florida detailed district assistants to help in local campaigns. In Indiana multigraphed circulars of suggestions were mailed in large numbers. Some State health officers identified themselves with the local celebration in the capital of the State and devoted their efforts to helping to perfect the program of one city.

Lantern slides and motion-picture films dealing with baby-health matters were supplied. Sometimes the latter took the form of very effective dramas; in one State the films were shown by the commercial motion-picture houses when not in use by the baby-week committee. Many State health departments lent exhibits or partial exhibits.

Baby weeks were usually celebrated at the same date throughout the State, and the difficulty of getting up exhibits in a form sufficiently inexpensive to be reproduced many times was a tax on ingenuity. The commissioner of health of Pennsylvania, who believes that it is wholesome for every town to construct part of its own exhibit locally, had inexpensive incomplete exhibits which he supplied to 24 localities in one week. In all there was enough of this material to cover 1,000 feet of wall space. It consisted of photographer's blue prints of charts and diagrams which were posted up unframed with push pins or framed in inexpensive white muslin and put up with tacks. (See illus. No. 11.) In Kansas an even cheaper form of exhibit, reproducible in great quantities, was printed on colored paper of the quality that is used for newspapers. A set of 12 such posters was sent free upon request to any resident of the State. In some communities these were mounted on stiff cardboard and used unframed; in others the material was copied by a sign painter in any desired color, and sometimes with variations in form. The Florida Department of Health sent out a series of small exhibits by parcel post.

A number of health departments issued special leaflets on baby care, sometimes in several languages, for use by local committees.

Many of the monthly health department bulletins issued in March took the form of a special baby number, which was widely distributed. Besides the publicity given through these bulletins, many departments supplied the newspapers throughout the State with news stories about the State campaign and with suggestions for local campaigns. In Illinois, for example, a press story was sent out not only to the newspapers but to women's organizations and presidents of the county medical societies, giving very full directions for holding a

baby-week celebration and setting forth at length the value of baby-health conferences. The Wisconsin health authorities employed a trained newspaper man for their baby-week publicity. The New Jersey Department of Health had the advantage of a special bureau of education and publicity, and not only circulated press material through local committees but reached directly the Trenton correspondents of newspapers published throughout the State.

One of the most valuable contributions made by the State health authorities was the preparation of statistical material on baby death rates. Such data showing the contrasts among towns and among counties proved an effective stimulus for those with bad records. In one State, Oregon, the State health officer wrote to club women asking them to use baby week as an opportunity to help make the birth-registration law effective.

STATE DIVISIONS OR BUREAUS OF CHILD HYGIENE.

In the four States having distinct bureaus or divisions of child hygiene valuable work was done by these departments. The division of child hygiene of the New York State Department of Health assisted by lending exhibit material, supplying speakers, helping in the general publicity campaign, and carrying on an extensive correspondence with committees in all parts of the State. The director of this division in Ohio visited 15 communities and, in order to stimulate interest in the campaign, gave 40 addresses in advance of baby week. In Kansas the division of child hygiene supplied posters, outlines, and suggestions for lectures to 122 communities within the State and 37 communities in 22 other States. The chief of the division visited many cities and towns and helped in the organization of baby-week campaigns and baby-health conferences.

The division of child hygiene and other branches of the New Jersey State Department of Health not only prepared the publicity material referred to above, but sent out lecturers from the department and printed three leaflets, of which 350,000 copies were distributed.

In Massachusetts a subdivision of the State department of health devoted solely to the interests of children supplied 8 lecturers, who gave 44 lectures in 11 communities and contributed 44 sets of lantern slides, 8 motion-picture films, and a large quantity of printed matter on baby care.

The exhibit material, lantern slides, and other forms of assistance which State departments of health can supply for local campaigns are listed in the appendix, page 121.

DETAILS OF BABY-WEEK PROGRAMS.

Program of days.

Some communities celebrated the whole week; in others baby week lasted one day or three or five days. The seven-day programs usually ran about as follows: Flag day, Baby Sunday, school day, fathers' day, outing day, visiting day, and birth-registration day. Baby Sabbath was also celebrated in many cities.

This general program was varied in some towns by a tag day; one featured a rural mothers' day, one a merchants' baby booster day, one a recognition day (when business houses put out flags and everyone interested was asked to wear a flower), and one had a baby button day. In North Dakota the general plan was to call flag day advertising day, and concentrate that day on letting everybody know what was coming. The program of a middle western city was: Baby Sunday, daddy's day, mother's day, the baby's day, home day, welfare day, parade day.

The Illinois State program began with inauguration day, on which a mass meeting was held and headquarters opened. Fathers' day there was converted into fathers' and sons' day; there was a mothers' day, little mothers' day, demonstration day, and community day. The most significant variation made in Illinois was the permanent-organization day held the final Saturday. On this day the executive committee and active workers had a meeting to make plans for the future.

FLAG DAY.

Flag day was usually the first day of the celebration, or, in some cases, the day before baby week opened. The object of flag day was to see that every house where a baby lived put out a flag and kept it flying throughout the week. One Missouri town, on the other hand, asked the parents to wear flags instead of flying them from the windows.

The flags adopted by the different towns varied widely. Some were symbolic in color and design, as in an Indiana town, where gold lettering on a white ground signified our most precious asset—the baby. Grand Forks, N. Dak., had pink and blue paper-muslin pennants—presumably for girls and boys, respectively—and the slogan “Grand babies for Grand Forks” printed in black letters. An Ohio town had a flag with a blue star; another Ohio town used a white felt pennant with its slogan printed thereon; and Milwaukee had an effective blue felt pennant bearing heavy white stenciled lettering. Many towns did not design a special flag for the occasion, but used small American flags.

Boy Scouts distributed the flags admirably in many towns. In a Missouri city the distribution was facilitated and the expenses shared by the local chapter of the Daughters of the American Revolution, which presented American flags to all school children in whose families there were babies. One Ohio town enlisted the interest of the fire department so that the firemen did the distributing.

Since the aim of flag day was to see that every baby had an emblem in his honor flying at his window, it afforded an excellent opportunity to find babies whose births had not been registered.

In many communities leaflets or pamphlets on baby care or programs of the local baby week were distributed with the flags. A letter that went to the mothers in a Texas city, with the flags and the leaflets on baby care, read as follows:

A LETTER TO THE MOTHERS OF BABIES.

The committee on banners for baby week presents you with a pennant and asks you to display it in your window in honor of your baby.

Each home where there is a baby under 1 year old will have this to show that all are thinking and working for the best things for the babies.

Bring your baby in its baby buggy or gocart or in your arms, with this banner, to the park on Saturday afternoon, March 11, and be in the best parade our city has ever had. There will be no horses or automobiles allowed, and all traffic over the line of march, which is not long, will be suspended in honor of our city's children. The parade starts from the park at 2.30 o'clock.

You are also invited to the exhibits and demonstrations March 9 and 10, in the city hall, and to all the special entertainments in the high-school auditorium. On Wednesday, March 8, from 3 to 5 o'clock, the Civic Club will entertain the babies up to the age of 3 years, and their mothers, in the park.

Watch the newspaper for announcements of baby week.

BABY SUNDAY.

Baby Sunday was generally observed by an announcement of baby week and its purposes from the pulpits of various religious bodies; frequently by the reading of the governor's or mayor's proclamation. In some cases sermons on baby welfare were preached. Physicians were invited to occupy pulpits on Sunday evening in several Illinois communities.

Sunday-school celebrations proved very popular.

FATHERS' DAY.

In manufacturing towns fathers' day was celebrated by holding shop meetings with good speakers to address fathers on the whole question of what the community owes to its babies, with special reference to local conditions, good and bad. In New York City and in another city in New York State the woman-suffrage organi-

zations made their street meetings on that day bear on the obligations of the voting father toward the home. One city had a special baby-week button for fathers.

Several towns were very successful in getting physicians to address fathers' meetings on the social evil and its effect on children.

The press gave invaluable help by printing the message to fathers which was prepared for fathers' day. The State health officer of Rhode Island published a message to fathers in the form of an attractive leaflet with a baby picture at the top of the page and below it the State slogan, "A square deal for Rhode Island babies." A widely popular message to fathers was that adapted from one used originally in Pittsburgh. (See Appendix, p. 138, and illus. No. 9.)

OUTING DAY.

An outing day proved popular in towns which celebrated later in the year than March. The usual plan was for the committee to collect all the automobiles it could borrow and fill them with mothers and babies. One city made a combination of outing day and visiting day; parties of mothers and babies were taken in automobiles to visit the baby camps maintained in one of the suburbs.

The material on this subject is meager, because in 1916 most of the celebrations were held in March and in many parts of the country such expeditions are appropriate only to a later season.

VISITING DAY AND PARADES.

Parades, sometimes combined with visits to infant-welfare stations, were reported from several cities. Boy Scouts and members of Little Mothers' Leagues, trained nurses, and others who were helping in the celebration were among those who marched in parades. Banners and labels voicing local needs were used effectively. In one Massachusetts town a fine looking baby wore a label stating, "I am a milk-station baby."

A Texas town parade which was very well managed led off with the mayor and city council and ended with babies. Here the rulings and order of march were published in the papers in advance. An automobile parade in St. Louis was similarly arranged, and included a tour of inspection of the municipal milk stations. Another Texas town had a parade of automobiles in which each women's club had a car, and these vied with each other in decorations. Small sons and daughters of the members rode in the club cars. One car was decorated in the club colors, green and white. Another was done in red, white, and blue and shaped like a baby carriage. All were gay with flags and slogans. Some parades were much simpler, with babies riding in baby carriages instead of in automobiles. In a Colorado town there was a squad of older children also, riding on tricycles.

Here is a newspaper report of a successful parade held in Louisiana:

SPLENDID PARADE SATURDAY CLOSED BABY-WEEK OBSERVANCE.

Babies to right of us,
Babies to left of us,
Babies in front of us,
• Babies enough to dazzle us,
God bless 'em,
So say we, all of us.

Saturday afternoon was ideal, when the babies of our city passed in review before as deeply interested a gathering as ever lined both sides of Ryan Street from the city hall to Mill Street.

Headed by the Royal Orchestra, then in turn by a detachment of the city police under the chief, the mayor, the commissioner of finance, and the commissioner of streets, the parade "fell into line" at the city hall, and under the helpful escort of the Boy Scouts wended its way north to Mill Street and countermarched to the city hall.

In beautiful floats, in push carts, in buggies, on tricycle, on bicycle, in toy automobile, and afoot, each individual holding a tiny flag, a thousand hearts beat happily as they passed through a street literally lined with admiring and cheering townfolk.

And the banners they carried were cheered to the echo, while the one at the head of the on-foot division, "Louisiana babies' first plea: Doctor, I want a record for me," seemed to act on the viewers as a plea for protection.

SCHOOL DAY AND SCHOOL COOPERATION.

The 1916 celebration proves that an enthusiastic interest in baby week on the part of school officials is highly important to the best success of a campaign. In many cases where the school officials understood the significance of baby week and cooperated actively an effective program was carried out almost without any other help. A New Mexico town, for example, celebrated only in the schools, bringing in mission schools and schools in the surrounding country, and was very successful.

In many towns the school auditorium was used for meetings. It appears that mothers brought their babies more readily to a school than to any other building for a conference. A Michigan town, for example, held its whole celebration in the school auditorium. The children wrote invitations to their mothers to come to a meeting. Eight hundred mothers came, and at that meeting the invitation was distributed for a fathers' meeting later in the week, which brought out an attendance of 600 to 700.

The school children frequently acted as distributing agents for programs and invitations to special meetings. A Wisconsin town issued a better-babies bookmark, with lists of books on baby care, and gave the bookmarks to the school children to take home. All the books mentioned were obtainable at the town library.

The pupils of both high schools and grammar schools did, in many communities, a large amount of valuable work in aid of the baby-week committee. Thus in a New England city the printing for the baby-week committee was done by the boys of the manual training school and the typewriting at the high school. Of course any assistance given by school children served to arouse their interest in the campaign.

A number of towns held contests in poster making in the schools. In several Illinois towns the school children made the posters and handbills; and the report from one town says that the posters made in the high school "were really works of art." In a Wisconsin city 3,700 handmade programs were printed, painted, and presented by the school pupils, and each program bore the name, grade, and school of its author on the back. These schools also had a poster competition.

Many school-day celebrations were admirably worked out. They varied from a lecture on the care of the baby, read to the class by each teacher, to the giving of a play by the children. (See Appendix, pp. 113 and 134.) Some teachers, especially of younger children, emphasized the care of the teeth. In one New York town the teacher organized a "toothbrush brigade," with prizes for the cleanest teeth. In schools where Little Mothers' Leagues were already formed the program usually consisted of demonstrations on the care of the baby.

If prize essays were read, a play performed, or demonstrations given by the school children, parents were usually invited.

This is the description one little girl wrote of the day's exercises in her school:

Last week we had what you would call a baby week. This was very interesting, as we had a lesson about it in our domestic science. We had charts all around the room about the food for the baby at its different ages; we had some pictures of beautiful children; there was a baby's outfit; there were some books on the care of children; there were also two baby's dresses, one which was very beautiful, made by our domestic-science teacher. We had a table in the center of the room with all the materials needed in giving the baby its bath. On the side of the room was another table with the materials needed in keeping the bottles sterilized, and we were shown the way of keeping them perfectly clean.

In our domestic-science lesson we had our school nurse to show us the proper way of bathing and dressing the baby and all about the correct temperature of the body. The teacher told us about the proper food we should give the baby at different ages. Samples of breakfasts for these children were shown.

In the afternoon the mothers came and heard a few remarks made by our dental nurse on the proper care of the children's teeth. There were some little children from the primary department who have a perfect set of teeth. They have been treated by our school dentist. They showed us how they brush their teeth. They had a napkin pinned on them, a paper cup in one hand, and their toothbrush in the other hand. and were scrubbing away when

a photographer snapped their picture. We had a baby there, too, and we put her in the tub and had a towel around her and pretended she had just had her bath when the photographer took her picture.

This ended our baby week in our school, which, I think, was interesting and enjoyed by all.

On the whole, the most popular way to celebrate school day was by the writing of essays. The offering of a simple prize often stimulated all the pupils to learn as much as they could about the baby. In one instance a boy carried off the prize for the best essay on this subject. Prizes were given by various people—for example, by the civic club in a Maryland town, and in a Kentucky town by the doctor who delivered the lecture from which the essays were written. One Rhode Island town had two prizes, a fountain pen for the best essay by a grammar-school girl and an inexpensive watch for the best poster by a boy.

Perhaps better than prizes was the plan hit upon by a New York town. Here the children's essays were based on extracts read to them by the teacher from the baby-week literature of the State health department. The best essays were read aloud at a meeting to which the mothers came and were afterwards published in the papers.

The following essay was written by a 12-year-old school girl:

THE CARE OF THE BABY.

The later life of the baby depends on the care it is given when it is young. It should be well cared for when young if it will be a healthy child when larger. The baby should have a bath every morning. It should have some one to take it for a walk in the fresh air; or, if it is too small to walk, sister can give it a ride in the baby buggy. The nursery, or room that the baby occupies, should be well ventilated. It should have no curtains or draperies that will catch germs. The baby should sleep in its crib or bed by itself. The bottle should be washed and cleaned thoroughly before it is given to the baby. The milk should be pasteurized so as to purify it for the baby's use. When the baby drops its bottle some mothers pick it up, wipe it off, and give it back to the baby. It should be washed before it is given to the baby again. The nipple will carry germs unless it is kept clean. When the baby cries some people shake it and tell it the goblins will get it—and other stories that scare it—if it does not hush. When he gets older he will have the same feeling. When he is in the dark he has a creepy feeling as if the goblins were after him right then. It gets on his nerves, and he can not forget it. When the baby cries it is not always hungry or bad; its shoe may hurt, or its clothing may be too tight, or something else. We should try to find out what the pain is. Sometimes the milk is left standing in the window where the sun can shine on it; the baby cries; we give the bottle to him without tasting it to see if it is sour. This overloads the baby's stomach with sour milk and may make him sick. We should never put anything on the floor where the baby can get it; if it does, it will put it in its mouth as soon as it gets it. It may get a pin and swallow it. When we have a sore throat or a cold,

we should not go home and kiss the baby and play with it until we have washed our face and our hands and our hair. We will give it to the baby in this way. We should always be kind to the baby. We should never speak in an angry tone or scare it. Kindness is a good thing to practice with the baby.

A school nurse in a Wisconsin town has sent a report which is full of suggestion for other communities:

As a result of baby week I gave four talks to the girls in the continuation school—about 60 girls who stay at home to help mothers or work out or in factories. A few of them were full-time pupils, but many of them go to school four hours a week. The ages were from 14 to 17; a few below.

1. Baby's bath and clothing. I had a large doll, with tub, blankets, soap, boric-acid solution, etc. The clothes were borrowed, and were made of good, plain material that people of small means could afford to have.
2. Care of eyes, ears, nose, and throat; exercise and sleep.
3. Feeding of baby. (a) Natural; (b) artificial—care of milk, modification of milk; prepared foods, uses and abuses.
4. Observation of well and sick baby.

The last day was spent mostly in answering questions the girls had written on slips. I am sure many of them came from the mothers.

This course proved so popular that the girls in the eighth grade wanted me to repeat the talks. Next year this will be given in connection with the domestic-science work in the continuation school and the eighth grades in the public schools. Some of the principals and I have decided that our domestic-science work is lacking in just this work of preparing the girls for home makers. We got some of our ideas from the New York schools.

Another Wisconsin town, which celebrated a little brother and sister day instead of school day, sends the following report from one of the adjoining rural schools:

LITTLE BROTHER AND SISTER DAY.

In making preparations for our little brother and sister day program at school I explained as best I could the purpose of the week and asked them to bring all the pictures they could of babies.

The week before I sent in the names of the families in the neighborhood, and they received booklets on infant care.

During the week the B class, after reading and talking about care of the teeth and what constitutes good health in general, wrote compositions on "How to keep well."

The C class, children from 7 to 9, had a lively discussion on "How to keep baby well," and wrote all they could about it later.

On Friday, March 10, we put up our pictures. One board we covered with prize winners, and we wrote what made them so in colored crayons. On another board we put a large picture of a baby and the slogan. On another "Fresh-air babies." Others we arranged on the walls.

Our program consisted of songs, recitations, and a health dialogue entitled "Mother Goose up to date," a talk explaining the week and baby problems, distribution of literature to mothers, and light lunch.

BIRTH-REGISTRATION DAY.

Many communities devised ways of popularizing the subject of better birth registration and centered the interest of the campaign upon it for a day or longer. Where a birth-registration canvass had been made beforehand (see p. 43) the results were usually printed in the newspapers or made the subject of special addresses on birth-registration day.

In Cleveland the health authorities adopted as a baby-week feature a practice which has now become a permanent part of the work of the department. This consisted in supplying the mothers of babies born in 1916 with certificates showing that their babies' births had been registered. The newspapers gave wide publicity to the fact that the mayor would personally present the certificate to the first mother who applied for it on March 6; they also advertised for the 1915 babies, printing the following coupons to be filled in by the mothers:

BIRTH-CERTIFICATE COUPON.

I believe in the need of birth registration, and as proof of my support I hereby make application for a "Certificate of birth registration" for my baby, _____, who was born at _____ on _____, 1915.

_____,
Mother's name.

_____,
Present address.

Father's name, _____.

Fill out this coupon and mail to the birth-certificate editor before Saturday, March 11.

The certificate of registration which is sent to each mother is attractive in design and printing, so that every mother who sees one in the possession of a neighbor wants one for her baby. (See illus. No. 10.) By the close of baby week there had developed a steady demand for certificates.

Many towns had exhibits which showed the importance of birth registration. Two were especially good. The first (hardly feasible for a large city) was used successfully in an Idaho town. The health officer prepared a list of all the children born in the district within the last five years of which he had a record; it showed addresses and names of parents in such a way that all could see at a glance whether their children were on the list. The other was the very simple device of showing at the exhibit a framed copy of the birth certificate used in that locality. To parents who did not understand anything about birth registration this was especially instructive.

In a Massachusetts town every mother of a baby under 6 months of age was asked to bring in the name, address, and birthday of the baby in writing and receive in exchange a copy of a standard

book on baby care, also the special bulletin on the same subject issued by the State department of health.

Baby-welfare information.

BIRTH REGISTRATION.

Many surveys or canvasses of births were made in connection with baby week. In some places this was done as a part of the celebration; in others the information was secured in advance and incorporated in the exhibit and newspaper publicity of baby week.

Such surveys were variously managed and even when they did not attempt to be complete they stimulated interest in the subject and secured the names of many unregistered babies. For example, the baby-week committee of an Ohio community with a population of about 4,000 found that the city clerk had the record of only 11 babies under 1 year, but by "asking the doctors several times" and "consulting the cradle rolls of the Sunday schools" they found a total of 70. In a Missouri city the teachers took a census of babies in each school district, and literature was distributed to them by the school children. In another Missouri city a committee was appointed to canvass for children under 3 and to study the enforcement of the birth-registration law.

In a Kansas town the cradle-roll departments of all the churches united to canvass the whole town for babies. Though the town has 20,000 inhabitants and 400 babies, they reported that they did it all in one day except for the few houses where no one was at home, and these they finished the following day.

A house-to-house canvass was made by club women in New Orleans to find the unregistered babies, after baby week, as a result of the interest aroused by it. A canvass for the babies of 1915 was made by the civics class at the high school of an Illinois town. The pupils were assigned by blocks. Among the Polish population they hunted up the baptismal records through the priests. A prize was given for the most zealous worker. Although the class worked only one week, and therefore did not find all the 1915 babies, the work done was valuable.

BABY DEATH RATES.

The baby death rate was studied in many communities and made the basis for newspaper articles and talks. The Rhode Island State Department of Health, for example, prepared a table showing for all towns of the State the numbers of baby deaths and the baby death rate from all causes combined and the numbers of baby deaths from gastrointestinal diseases and malassimilation. The form is suggestive.

"A SQUARE DEAL FOR RHODE ISLAND BABIES."*Rhode Island infant mortality statistics for 1914.*

Towns and counties.	Deaths under 1 year.	Number of deaths from gastrointestinal diseases and malassimilation under 1 year.	Per cent of deaths under 1 year from gastrointestinal diseases and malassimilation to total deaths under 1 year.	Ratio of deaths under 1 year to each 1,000 births.

The sociology department of the University of North Dakota prepared a printed card for the Grand Forks baby week, showing the births and deaths under 1 year during 1915 at Grand Forks. It enumerates the deaths from various causes; it compares the infant mortality rate of Grand Forks with three more favorable rates elsewhere; and after stating that only 35 per cent of the registered births had been reported within 10 days it urges the importance of prompt registration.

COMMUNITY CONDITIONS AND BABY-WELFARE WORK.

A good example of the way in which the needs of a community were analyzed and published during baby week is found in the following leaflet issued in Little Rock, Ark.:

LITTLE ROCK HAS

Good laws, good homes, good streets, good institutions, indeed, many things that are creditable to the city. Still all has not been done for the welfare of children, and here are a few of

LITTLE ROCK'S NEEDS.**HEALTH.**

Full-time health officer (see recommendations of present health officer in his last report).
Sufficient sanitary inspectors.
Stricter interpretation of quarantine law.
Public-health nurses.
More hospital facilities.
A convalescent hospital.
A tuberculosis hospital (county).
A housing code.

SCHOOL.

An open-air school.
School nurses.
Regulation of school lunches.
Compulsory school law.

PLAY.

A comprehensive plan for the regulation of the social life of the younger generation.
This would include—
More parks.
Supervised playgrounds.
Social centers.
Public baths.
Music in parks.
Recreation commission.

PHILANTHROPY.

An industrial school for delinquent boys.
Charities indorsement committee and federation plan for financing charities similar to Cleveland plan.
Board of public welfare.

The later pages of the leaflet explain under each heading exactly what is needed.

The immediate results of studying and publishing the facts about local conditions appeared with special vividness in an Ohio city:

In one small city in the State nothing was known about the milk supply until during their baby-week activities a study was made which proved that out of four dairies supplying milk to the babies but one had conditions which could be tolerated at all; and on further study of the deaths of babies during the previous year it was found that the death rate had been persistently high; that the proportion of deaths among artificially fed babies was large; and that the majority of deaths occurred in families supplied with milk by two of these dairies. The facts were made public, and within two months conditions, while not by any means ideal, were nevertheless improved very much, and the members of that community are eagerly watching this summer to find what the results of hot weather will be.¹

Baby-welfare exhibits.

The many exhibits held during baby week in 1916 had one or both of the following aims: They showed the need of infant-welfare work in a particular community, or they gave mothers information regarding the proper care of babies and children.

INTERESTING DEVICES.

The devices of special interest reported from exhibits on community matters included the birth-registration exhibits to which reference has been made on page 42.

An exhibit on the dairy inspection system was prepared by a city chemist in Texas. He showed the visitors clean and also dirty milk under the microscope. The exhibit in a Pennsylvania city included material about pure food, with a special demonstration by girls from the domestic-science classes of the public schools. They cooked the dishes and explained how each article of food was prepared. At the same exhibit boys of the manual training classes made and demonstrated small models of a dirty dairy, a clean dairy, and a playground. A demonstration milk test by a school class in animal husbandry was reported from one western baby week. (See p. 17.) Women's clubs, in several communities, undertook to provide hostesses at the exhibit every day. Where there was more than one club in the town, different days were assigned to different clubs. In some towns tea was served at the exhibit. One small town arranged also for music at the exhibit, and gave a red flower to everyone who attended.

A State board of health says:

In some places the exhibit is opened to the tune of the "big noise." About half an hour before time for the first performance all the bells, whistles, and

¹ The Ohio Public Health Journal, September-October, 1916, vol. 7, p. 396.

other noise-making contrivances are turned loose. To be successful this plan must be given enough publicity for everybody to know what it means when the noise begins.

EXHIBITS ON BABY CARE.

The exhibits on the care of the baby frequently included demonstrations. At one Rhode Island exhibit a woman showed how patterns for baby clothes should be laid on the material to cut to the best advantage. The proper way of bathing and dressing a baby was frequently shown. Some committees added to the interest of this demonstration by having a live baby for a subject instead of an india rubber one. In one town a series of mothers took charge each afternoon and bathed their own babies at the exhibit for the benefit of those who wished to learn. This required some caution on the part of the committee in selecting mothers who were expert. In many places the Little Mothers' Leagues had charge of the bath demonstration, though it is not recorded that anyone lent them live babies.

Several towns in Illinois had the advantage of an exhibit and demonstration by a woman, herself both a mother and a business woman, who had made a baby bed of a basket and a baby pen of boxes. She explained the construction of these articles and of some original toys, and the arrangement of shelving and equipment in her bathroom.

One Kansas town had an exhibit in contrasting layettes—old-fashioned ones, with very long dresses and elaborate embroidery, and inexpensive modern ones made by the high-school domestic-science class. Some of the latter were fashioned from an adult's old clothes. One layette cost \$1.50, one \$1.75, and one \$2.

An unusual homemade exhibit of what can be done at small expense for the amusement and instruction as well as the clothing of children comes from New Jersey. The author's description of it is given in full in the appendix, page 144.

Posters in foreign languages, illustrated with brightly colored photographs, were used to teach simple facts in baby hygiene and care at the Baltimore exhibit. Another original feature in Baltimore was an exhibit of posters secured from a newspaper poster competition. (See p. 51.) The method of making an inexpensive "contrast exhibit," which also attracted a good deal of attention, was described as follows:

The nurses took a large packing case and divided it in half; in one side they represented very realistically by means of toy furniture and tiny dolls a crowded, cluttered, dirty kitchen, with cats, dogs, and even a goose walking around; food thrown around on the floor; a sick child in a little cot, drawn up close to the stove, with washing going on in the back of the room.

Contrasted with this was the other half of the box, arranged as a sick room, walls papered in white, the window wide open, covered with mosquito netting; a tiny white bed, a white chair, a white table, and a little chest of drawers being the only furniture. On the table was a miniature bottle of milk and a dish of eggs to show that these were the proper food for a sick child.

The cost of the transformation was carefully figured by the nurses, who estimated that it would cost about \$3.50 to make such a change.

The mother was represented in the exhibit as saying to the nurse, "Why didn't I send for you before?"

A carefully planned exhibit, showing considerable ingenuity, was held in Stamford, Conn. (See illus. No. 12.) The report of the committee follows:

STAMFORD BABY-WEEK EXHIBIT.

(All exhibits were displayed in shallow booths with a railing across the front. Labels for each article were well lettered and large enough to be easily read.)

1. *Prenatal care*.—(Space 7 feet deep by 10 feet long.) Display of equipment and clothing needed for mother and baby at time of birth.

Panels, Prenatal Care; Midwives; Care at Birth.

Leaflets on prenatal care distributed.

Stamped post cards addressed to Children's Bureau requesting pamphlet on Prenatal Care were sold for 1 cent.

2. *Bathing the baby*.—(Space 7 by 10 feet.) Equipment for baby's bath, including cupboard with shelf for soap, a cheap box for baby's clothing, an inexpensive and attractive basket fitted up with toilet articles, towels, table, and tub. Demonstrations given, using doll and part of the time a real baby. The nurse in charge did not merely go through the motions, but bathed the doll or the baby and dressed it. Water was warmed on the gas range in the adjoining booth.

Panel, Bathing the Baby.

3. *Feeding the baby*.—(Space 7 by 14 feet.) Booth equipped with stove, table, homemade ice box, homemade fireless cooker, an equipment for modifying milk, and a washstand. A washbowl such as is used in a bathroom was placed on a standard made by the carpenter, with a shelf at the top upon which was placed a 5 or 10 gallon oil can with a faucet; underneath was placed a pail as large as the can to catch the water from the bowl.

Demonstrations were given by a nurse in modifying milk, accompanied by brief talks on baby feeding.

Panels, Mother's Milk; The Best Substitute; Feeding the Baby.

4. *Sleeping*.—(Space 7 by 16 feet.) The booth contained an outdoor sleeping box attached to the window, a basket with a doll baby to be set in the window box, a sleeping-out hammock, baby bed, pen, and good and bad baby carriages.

All the articles except the baby carriages had been made by a carpenter under directions and were inexpensive.

The demonstrators went into much detail in explaining the use of the equipment, hours for sleeping, etc.

Panels, The Baby Asleep; Fresh Air and Exercise for the Baby.

5. *Things good and bad for the baby*.—(Space 7 by 10 feet.) A long table was divided into three parts by strips of tape. The center division contained a large assortment of articles, and the empty spaces at either side were labeled, respectively, "Things good for the baby" and "Things bad for the baby." The

articles included a pacifier, a soothing-syrup bottle, a celluloid device for the baby's thumbs, a pickle, sausage, cake; bottles labeled and containing tea, coffee, beer, and water; a banana, a toy bed with baby sleeping alone and another with baby sleeping with mother, a rubber diaper, a good nursing bottle, the wrong kind of nursing bottle, etc. The explainer gathered a group of spectators and then called on them to tell her in which of the two spaces (for good or bad) each article belonged. After all the articles had been sorted into the right spaces, with proper explanations, they were jumbled together again into the central space, ready for the next crowd.

Panel, Things to Avoid.

6. *Clothing for the baby.*—(Space 7 by 20 feet.) The clothing displayed was supplied by a department store, which sent show cases, standards, and tables. Patterns for simple garments were made by women and sold for 1 cent each. A long table was kept cleared for cutting, and women were invited to bring material and have it cut for them at the booth. The clothing was for children up to 6 years. Good and poor wash materials were displayed on cards.

Panel, Clothing for the Baby.

7. *Baby-health conference.*—The conference was carried out along the lines suggested by the Children's Bureau, with the added feature of a baby-improvement contest for babies under 1 year, to continue until September. Children up to 6 years were examined.

In Stamford the committee was especially fortunate in having a space excellently adapted to a baby-health conference, directly across the hall from the baby exhibit. This included a waiting room, dressing room, and large room (about 60 by 30 feet) for examinations. The large room was divided by wire screen into examination and audience rooms.

8. *Children's exhibit.*—As it was decided to include welfare of children up to school age in the educational work of the week, space on a separate floor was devoted to the following subjects: Children's games, especially home occupations; children's books and story telling; food for children from 2 to 6 years; the Don't Care home; the Do Care home; the milk supply; the Children's Home Society; a dental clinic.

SECURING EXHIBIT MATERIAL.

Exhibits were borrowed from various sources, and probably the most useful were those partly supplied by the State health departments, agricultural colleges, or national organizations and partly prepared locally. A number of towns, however, were disappointed because the material was delayed in reaching them or had to be sent on too soon to the next town. A town in Oregon which was disappointed by not receiving the material sent for had a local sign painter make six panels from the illustrations in the bulletin on Child-Welfare Exhibits.¹

In a city of New York State the chamber of commerce gave a valuable exhibit which was turned over, after baby week, to the women's clubs to be used at a permanent welfare station. Incidentally at this exhibit during baby week two retired trained nurses explained the charts and distributed literature in Italian, Polish, and Yiddish.

¹ U. S. Children's Bureau. Child-Welfare Exhibits: Types and preparation. Bureau publication No. 14.

A town in Washington had an exhibit produced by the local dental society consisting of plaster casts of jaws, illustrating the bad effect of thumb sucking.

Many towns obtained good exhibits at small cost by clubbing together with other towns and arranging a circuit for one exhibit. In Los Angeles, where the county subscribed generously to the campaign, the exhibit was carried through the towns of the county. In Nebraska the Omaha exhibit was circulated among the smaller towns of the State.

MOVING AND CHANGING EXHIBITS.

Some committees which did not find it feasible to hold an exhibit in a big hall, a school, or some other building where there was plenty of wall space, showed borrowed panels in a store window, changing them every day or two to keep up the interest of the passersby. Infant-welfare exhibits were shown in public schools in New York City and moved daily from one school to another. Some six or seven sets of material were used in this way during the week, and as many schools were covered as possible.

Baby-health conferences.

Probably the one feature most generally carried out in baby weeks throughout the country was a baby-health conference. Three types of conferences were reported. A baby-health conference without a score card, a baby-health conference with a score card, and a baby-improvement contest. Many baby contests were held also.

POPULARITY OF NONCOMPETITIVE CONFERENCE.

From a Florida town comes the report, "Last year we gave prizes, but we think that many a mother would rather have a certificate or a card showing the standard of her baby." From Indiana comes a report showing that what the mothers really valued was the opportunity to have their babies examined: "The attitude of the mothers was very good. None spoke of the prizes; all were eager for the physical ratings. Some thought their babies would not score high, but wanted information to work on when their interest had been aroused. They all expressed themselves as going to have the fault remedied." And a Missouri town reports: "The indifference of the mothers to the prizes and the appreciation of the value of the scoring were most gratifying."

"One feature of the work which pleased me very much was the fact that the women understood, after a little explanation, that this was in no sense a baby show," writes one of the federation officers from the Middle West.

And from Colorado comes this:

* * * At the contest we made an examination of 21 babies. The examining physicians made as helpful a summary for each mother as they could. This was my first experience at this sort of undertaking. I, too, have come to see that the prize feature is not commendable. However, the contest did not create a feeling of bitterness, but I see how it might readily have done so had we not exercised the greatest care in explaining the purpose of the contest to the mothers. Next year I hope to make the child-welfare phase of our conference of much more significance. We will feature it as a baby examination or health conference. In this way I hope we may encourage mothers to bring babies who are most in need of helpful suggestions relating to the health of their babies. We will also make it noncompetitive, unless it should seem advisable to give certificates of commendation to mothers who exercise the greatest care and interest in improving the conditions which relate to the health of the baby.

This clipping from a South Dakota paper shows that the women made an effort to avoid the bad effects of the competitive element:

It was the wish of the woman's club to have the newspapers refrain from publishing the scores made by the babies in that the new baby show is a fight for all babies' welfare and not to determine which baby will score the highest mark on health. Formerly the baby shows were chiefly for picking out the baby which enjoyed the best health, but to-day this style has given way to the new idea of being helpful to the mothers in determining the health condition of the child and thereby give her pointers on how to remedy any defect.

A close analysis of these reports reveals the reason for this growing popularity of the noncompetitive conference: The mother of a splendid baby gravitates naturally toward any gathering where he will shine by contrast with other babies and perhaps win a prize; just as surely the mother of a child which is not thriving shrinks from the comparison which means for her mortification rather than help and advice. Typical of this changing feeling was the experience in a western town, where the committee, after planning a contest, became convinced that it was not a good thing and changed to a conference in the middle of its preparations. The agricultural college of one middle western State sent around to the clubs of the State a suggested program which included a debate: "Resolved that baby contests are injurious to the best interests of the baby." One State health officer in the East, in collecting data on the towns which celebrated baby week, writes that he made no attempt to tabulate the communities which held baby contests only, as a number of years' experience had shown that these contests alone are a hindrance rather than a help to baby-welfare work.

APPOINTMENTS IN ADVANCE.

Another point made plain in the reports is the fact that too great care can not be taken, through making appointments in advance, to prevent crowds of mothers and babies gathering at conferences.

Some committees reported regretfully that they were completely swamped by the number of babies and mothers who came without appointments, so that mothers sat about with their babies for hours and finally went home without an examination. It is obvious that there is an unnecessary amount of discomfort to the mother and of danger to the baby in such an arrangement.

An admirable scheme which many towns used in 1916 was the insertion of a blank coupon in the baby-week program and in the newspapers, to be filled in with the name and address of the parents who wanted appointments. In at least one city the coupon directed the mother to fill in and mail it with a 2-cent stamp, for which an appointment card would be sent to her.

Competitions of various kinds.

It is plain from the experience of 1916 that the competitive idea has a very wide appeal. Committees in many communities were quick to appreciate this fact, and, where they disapproved the idea of contests among babies, they introduced the element of competition in some beneficial form.

POSTER COMPETITIONS.

A competition having a real value was that for the most effective poster, whether of original design or made by cutting and pasting. Some poster competitions were open to everybody and some only to school pupils. In many cases the baby-week committee threw the lists open well in advance of the actual baby week and thus secured a good design for the poster, which they could reproduce by the hundred and post broadcast for advertising purposes.

One of the best of these competitions in 1916 was planned by a newspaper in an eastern city. Half a page was devoted every day for several weeks to information about child welfare. The posters were to be based on this information, and the contest was divided into three parts, for younger school children, high-school pupils, and the general public, respectively. The posters were judged not only for attractiveness of design but also for accuracy and educational value.

COUNTY COMPETITIONS.

In Kansas the governor offered a trophy for the county with the best health record for 1916-17. The prize will be awarded to the county that shows by its health and sanitation record and by its activities for child welfare that it is the best county in the State in which to rear children. The ratings are determined according to the following factors:

1. Number and rating of standardized schools. Junior health officers in the schools.

2. Absence of child labor; safety first in reference to farm machinery.
3. Full or part time county health officer. Promptness and completeness of his reports to the State board of health; the infant mortality, morbidity, and adult mortality rates and the presence or absence of epidemics of communicable diseases, as shown by these records.
4. The county medical society. The promptness of the doctors in reporting births and communicable diseases, as required by law; the absence of ophthalmia neonatorum and preventable epidemics of communicable diseases.
5. City and rural churches and community clubs. The sanitary condition of churches and the interest taken by churches in health and sanitation in their respective neighborhoods; the child-hygiene Sunday and the activity for child hygiene in the Sunday school; the community forum or other community organization and its activities in health and sanitation.
6. The women's clubs, farmers' clubs, and other organizations. Child-hygiene programs and health and sanitation activities; study classes in child hygiene; baby days and other activities for children.
7. County commissioners. The amount appropriated per capita for public health; a full-time county health officer; county nurse; county hospital and other agencies for preventing disease and improving conditions of public health.
8. Pure food and drugs inspection and regulation of milk supply. Sanitation of food and drug establishments.

BETTER-MOTHERS COMPETITIONS.

One of the happiest ideas was the contest among mothers in answering questions on the care of the baby. Four localities reported a competition of this sort in 1916, and it is a plan so simple and admirable that it could be incorporated in the program of any community.

In Trenton, N. J., where a better-mothers contest was carefully worked out, the list of questions was as follows:

1. How many children have you had? How many are living?
2. What do you feed your baby?
3. How often do you feed your baby during the day? During the night?
4. Do you give the baby water to drink?
5. Do you give your baby coffee, tea, beer, pickles, sausage, bananas, oranges, zwieback, eggs, broth, or oatmeal?
6. Do you buy bottled or loose milk?
7. Where do you keep the milk?
8. Where does your baby sleep at night? In the day time?
9. How many hours does your baby sleep at night? In the day time?
10. Do you change the baby's clothes when you put him to bed?
11. Do you open the windows in the room in which your baby sleeps?
12. Do you rock the baby to sleep?
13. How often do you bathe your baby?
14. Do you use hot, cold, or warm water for your baby's bath?
15. How soon after feeding your baby do you give it a bath?
16. Do you give your baby a pacifier?
17. Is your baby allowed to go to sleep nursing a bottle?
18. Do you take your baby up whenever he cries?
19. What do you do for your baby when he vomits?
20. Where do you go for advice when your baby is sick?

21. How do you protect your baby from the flies in summer?
22. Do you let anybody kiss your baby on the mouth?
23. Is your baby registered?

After the contest the committee published in the papers a report which answered all the questions in full. The fact that 32 mothers out of 198 had given perfect answers indicates that some more difficult questions might well be included.

In another city the questions and a series of articles on baby care were published in the papers. Only mothers of young babies were admitted to this contest. In a third city a group of mothers was supplied with a list of 10 questions on the care and feeding of children. A series of popular meetings was held at which motion pictures and cartoons were shown and addresses delivered on the subject. The mother who gave the best answer in writing received a prize.

OTHER COMPETITIONS.

In connection with a baby-improvement contest held by the milk stations in New York City, prizes were given not only to those babies who showed the greatest improvement during a period of six months, but also to those most regular in attendance at a milk station.

Competitions for the best school essay on the care of the baby and for the best slogan are referred to elsewhere. (See pp. 40 and 57.)

Meetings.

SECURING AN AUDIENCE.

Many of the communities report enthusiastic and well-attended meetings, and various expedients proved useful in securing good audiences. Personal invitations were sent to mothers in some communities, especially when the meeting was arranged for mothers. Sometimes the school children helped in distributing invitations; as a part of the school celebrations they wrote invitations and delivered them not only to their own mothers but to others in their neighborhoods. Sometimes printed invitations were delivered with the flags on flag day. It is safe to assume that invitations personally addressed always received more attention than handbills.

This form was used by the schools of a California town:

Your are invited to join with the parents of over 2,000 communities in the United States in celebrating baby week, March 4 to 11, 1916.

The Social Service League is holding an open meeting at 3 o'clock Friday afternoon, March 10, under the trees near the Presbyterian Church, or in the Sunday-school room, according to the weather. Will you come and bring your baby and hear more about what baby week means? It is a social meeting, and the grammar-school children will give a little play.

Also please help by putting this sign in your window or at your gate, so that everyone may know yours is the home of a baby under a year old.

A Massachusetts town used the following shorter form with a quaint child's picture in the upper left-hand corner of the printed card:

You and your friends
are cordially invited to a talk on
THE HEALTH OF BABIES
Illustrated with stereopticon
in the Town Hall
Tuesday afternoon, February twenty-ninth,
at 3 o'clock.

Motion pictures, plays, or popular features were frequently used to insure a good attendance for evening or afternoon meetings. Musical numbers added to the attractiveness of many programs. The New York baby-week committee compiled a list of songs about children and of cradle songs, both vocal and instrumental, which is given in the appendix, page 143.

An Alabama town and a New York town used a brass band to draw the crowds down the street to the door of the meeting—an excellent expedient for a mass meeting planned to interest everybody.

WHERE MEETINGS WERE HELD.

Meetings were held successfully in all sorts of places—courthouses, schoolhouses, department stores, and hired halls.

In large cities where meetings were held only in the central headquarters the attendance was sometimes disappointing. The committees in a number of large cities divided the city into sections, each of which held its own celebration according to its local character and institutions. For the experience of Boston, see page 23. In Columbus, Ohio, 85 addresses are reported, delivered at 43 active baby-week centers; among these were four big noon meetings at the railroad shops.

SPECIAL MEETINGS FOR NONENGLISH-SPEAKING AUDIENCES.

The towns and cities with large foreign colonies made a point of having a Polish night, an Italian night, etc., selecting speakers well known among the respective nationalities. Such meetings were sometimes combined with special evenings at the central exhibit, where guides who could speak the foreign language were on duty.

In several cities, where there are settlement houses in the foreign quarters, baby-week meetings were held at the settlements.

Plays.

The instinct of children to dramatize what interests them was employed to good advantage in many communities by the perform-

ance of short plays, which had as themes either the proper care of the baby or the general subject of the health and happiness of children. These plays proved to be a very successful part of baby week.

The two plays by G. W. P. Baird, *The Theft of Thistledown* and *The Narrow Door*, were used very frequently, as were also the three plays dealing with health subjects in the volume of *Five Playlets* by Hester D. Jenkins. In many communities original plays were written and acted. Several of the plays listed on pages 134 to 136 were produced in this way.

Pamphlets on baby care.

Baby week was generally used as an opportunity for distributing educational pamphlets or leaflets on the care of the baby. In a few communities, where it was impossible to carry out other plans, this formed the chief part of the baby-week celebration. (See p. 12.) Pamphlets or leaflets were nearly always obtained free or at nominal cost from a Federal agency or State department of health, or from some national organization, although the material in foreign languages usually had to be printed locally. In an Indiana town, for example, the foreign priests translated leaflets.

METHODS OF DISTRIBUTION.

In some cases pamphlets and leaflets were delivered with each flag on flag day to the mothers of babies under 1 year; in others they were distributed by those making house-to-house canvasses for birth registration.

Committees holding a baby-welfare exhibit usually had a table where printed matter was given away or sold. Government bulletins which could not be obtained in large numbers were successfully distributed in two ways: In one case the names and addresses of people wishing copies of the bulletins were taken down on lists which were later sent in to the proper bureaus; in the second case (see p. 47) stamped postal cards, already addressed to a Government bureau and requesting publications, were sold for 1 cent. It was then a very easy matter for the person wanting a bulletin to fill in her name and address. In both cases sample copies of the bulletins were displayed on the table at the exhibit.

Publicity.

No matter how carefully worked out and admirable a program the committee devised, it was never thoroughly successful unless the publicity was well handled. And the history of 1916 shows that in many places, by the use of a little ingenuity, splendid publicity was achieved at almost no cost.

NEWSPAPERS.

Newspapers throughout the country willingly gave columns of space to the baby-week material when it was supplied in available form, as readable news rather than propaganda.

An interesting way to use baby-welfare information in the newspapers was suggested in a Wisconsin town, where a series of articles prepared from the national statistics supplied by the Children's Bureau was used in contrast with local figures for town and State showing where improvement was necessary.

Short articles on the care of the baby were widely used, and many editorials appeared during the week. In fact, a wide variety of material was carried by the papers in 1916.

Here, for example, is an editorial from Illinois:

A REAL BABY WEEK.

This is baby week. The Children's Bureau of the Department of Labor designates the current week by this title, with the purpose of stimulating nation-wide interest in the conservation of human life.

Locally, if baby week is to be anything more than a mere perfunctory "observance," certain definite results should be achieved.

The playground movement should get a substantial start, so that the youngsters may be relieved of the dirt and danger of the public streets and given recreation which will build up instead of tearing down.

The sanitation question should be brought home to every section of the city, and dirty alleys, streets, backyards, and barn lots should be outlawed. The provision dealer and the butcher should be made to understand the menace of the fly. And ample provision should be made for keeping the inspection of milk up to standard.

The necessity of absolute obedience to quarantine regulations ought to be brought home to every parent. Celebrating baby week while carelessness permits contagion to increase right along is something of a contradiction.

The visiting-nurse movement should be fortified and arrangements made whereby all mothers can avail themselves of reliable instruction in nursing and free medical advice when necessary.

The mothers' pension law should be applied wherever there is need or justification, and its purposes made plain to all mothers who might come within its provisions.

Special thoughtfulness should be devoted to backward and deficient children in the schools and medical inspection should be emphasized and extended.

These are some of the practical obligations presented by baby week. They affect our children directly and vitally and concern the entire community. Reading pretty sentiments and wearing baby ribbons form one way of keeping baby week. Helping to do something real for the health and happiness of the children right here in our own city—in our own blocks—forms another.

Let's make something practical out of baby week.

A Kansas paper published the following, taken from the special baby-week bulletin of the State board of health:

IF BABY COULD TALK HE WOULD SAY:

Do not kiss me on the mouth.

Do not let the sun shine in my eyes nor the wind fill them with dust.

Do not sneeze or cough in my face, for I may take cold; and that would be bad for me.

Do not expose me to whooping cough or measles or other catching diseases, or I may get sick and die.

Do not pick me up by the arms. Be careful how you handle me and lay me down.

Do not give me candy or other things which are not good for me.

Do not give me a dirty pacifier to suck nor allow me to suck my thumb, for it will spoil the shape of my mouth.

Do not rock me to sleep nor teach me other bad habits.

Do not take me to the motion-picture show nor keep me up nights, for it robs me of my sleep and makes me cross.

Do not dose me with patent medicines or nasty mixtures.

Do not give me wine, beer, or whisky, coffee nor tea, for I want to keep well.

Do not jolt me nor trot me on your knee when I cry.

I want the right things to eat and I want my meals on time.

I want some pure cold water to drink between meals, for I get very thirsty.

I want a bath every day and plenty of clean clothes.

I want my own bed, a comfortable room with the windows open, and plenty of time for sleep, for I must have it in order to grow.

I want to be taken out of doors every day for the fresh air.

I want mother to love me and always be gentle with me.

I want to be a good baby.

And this was used in New Jersey papers:

TWO TONS OF PAPER.

One of the contributions made by the State department of health to the baby-week campaign is the printing and distribution of leaflets on the subject. These are three in number, one a single-page leaflet on the importance of birth registration, another a four-page circular on the care of babies, and the third a four-page circular on the community's responsibility for baby work. Of the first two 125,000 each are being printed and of the latter 100,000, making a total of 350,000 leaflets.

In printing, sheets 25 by 38 inches in size are used, and one side of 8 or 10 leaflets is printed at each impression. The entire work will require 75,000 impressions for printing on both sides and consume approximately 4,000 pounds or 2 tons of paper. Allowing time for locking up the forms, the work will keep one printing press busy for 10 days of 8 hours each, printing 1,000 impressions per hour.

The press was put in operation Tuesday of this week and an advance lot of the circulars was delivered at the office of the State department of health yesterday. Shipments will be made as rapidly as printed, and the circulars will be furnished to any community where the local baby-week committee will make careful distribution.

Additional examples of good newspaper articles on baby week are published in the appendix, page 136.

SLOGANS.

A good slogan proved an important feature of the campaign and a competition for the slogan made excellent publicity in advance of

baby week. Los Gatos, Cal., for example, had such a competition, and the prize was won by the following:

"Let's make a better Nation
By baby conservation."

Other towns used a shorter and more trenchant sentiment, as:

"Milwaukee battles for babies."
"Utah's best crop."
"A square deal for Rhode Island babies."
"Every baby a healthy baby."
"The best for baby."
"100 per cent for the babies."

Some of the slogans were rhymed:

"Baby health, Nation's wealth."
"Baby's health means more than wealth."
"Baby health—civic wealth."
"Better babies, better care, is the watchword everywhere."
"Better babies, too, in Kalamazoo."
"Arkansas wealth for baby's health."
"Better fare, better air, better care for babies."

POSTERS.

In many cities posters designed especially for baby week were plastered everywhere for some time in advance, using all available space on billboards, in street cars, in merchants' windows, etc. These varied from the very simple but striking card in Little Rock, Ark., on which was printed in large letters—

WHAT ARE YOU DOING FOR BABY WEEK?

MARCH 4-11.

to colored pictures of babies, or mothers and babies, used in Erie, Pa., New York City, and elsewhere. A striking poster was used in Cumberland, Md. It showed the picture of a healthy little boy, and under it the label "One baby dies in Cumberland every four days."

Less expensive and more appropriate for small towns where a limited number were used were the posters with pictures of babies' heads, etc., cut out of magazines and pasted on stiff cardboard and finished with hand or gummed lettering.

The poster competitions previously described furnished many of the original designs. (See p. 51.)

Methods of displaying posters depended on the ingenuity of the committee in charge. One town reports 50 large muslin signs carried by delivery wagons, and large muslin signs hung across the street were not uncommon.

A street car company put the slogan around its safety-first signs.

STATIONERY AND PROGRAMS.

Some towns were ambitious enough to have stationery printed for baby week. Sometimes slogans and special designs were printed on the letterhead as well as the names of the committee chairmen, etc. A simple and effective device was to have the slogan printed across the envelope; this was sometimes done less expensively with a rubber stamp. There proved to be a practical value, besides the advertising value, in baby-week stationery which gave an address and telephone number, especially in campaigns that involved considerable correspondence and telephoning.

Much ingenuity was shown in printing attractive programs, and good programs widely distributed brought out large attendance even in bad weather.

In a western city an eight-page program was interspersed with public-health mottoes. The program of events was very fully printed, including the list of hostesses from the women's clubs each day.

LEAFLETS, CARDS, TAGS, ETC.

In addition to the educational pamphlets and leaflets, described on page 55, special folders and cards were printed for popular distributions in many places. The message to fathers has already been mentioned. (See pp. 37 and 138.) Occasionally there was a message to mothers or a message for brothers and sisters. Philadelphia expanded this idea to include many groups of citizens and sent out appropriately worded cards addressed To All Citizens of Philadelphia; To You as a Manager of a Charitable or Social Agency; To Members of Women's Clubs; and others. Here are two examples:

MR. BUSINESS MAN:

Do you know that the infant mortality rate of a city is becoming the index of the prosperity of a city? This is a fact.

Do you know that Philadelphia in 1915 stood sixth regarding the infant mortality rate in first-class cities?

About 50 per cent of the deaths of Philadelphia's babies is preventable. In other words, these babies die because of the ignorance of mothers, poor housing, and poverty. Thousands are maimed for life by the same diseases.

Does this interest you?

Faithfully, yours,

EXECUTIVE COMMITTEE.

TO EMPLOYERS OF WOMEN:

Did you ever stop to think that there are probably many women in your employ who have babies at home, and have you thought of the importance of the health of these women to the health of their babies?

Perhaps you have no married women in your employ, but you probably employ women who will be mothers some time in the future.

We are sending you this card merely to bring to your mind during this baby-week campaign the fact that as an employer of women you have a great responsibility in relation to the health of the future citizens of this city.

It is, of course, needless for us to ask your cooperation in doing whatever you can for the health of the women you employ. We simply desire to suggest the thought that their health means more to the city than their personal comfort.

Faithfully, yours,

EXECUTIVE COMMITTEE.

Many towns and cities found it easy to persuade their dairymen to distribute printed matter with the milk bottles during baby week. Sometimes round stickers were supplied by the committee to paste on the bottles, and sometimes tags—all giving directions about the care of milk in the home. One city in New York State supplied tags and elastic straps with which to fasten them on. In Milwaukee the milk-bottle legends were changed each day.

In Troy, N. Y., the sending out of the circulars with the milk bottles was handled by the local health officer. Here is the letter he sent to the 106 milkmen of the city:

TROY BABY WEEK.

DEAR SIR: We recognize that milk not properly cared for in the home breeds DISEASE and even DEATH.

We recognize, also, that milk left uncovered in ice box or room absorbs flavors and odors from other articles near it, and that in most of such cases the blame is placed on the MILK DEALER.

We therefore ask you to cooperate with us in our effort to impart to all milk consumers a few important facts about milk.

We are sending you circulars containing instructions for the proper care of milk. These we earnestly urge you to give out (one to every milk customer), beginning Tuesday, March 7. If you need more circulars please apply to Health Officer, City Hall, Troy, N. Y.

BABY-WEEK LITERATURE.

Aside from material of an educational nature, the baby weeks of 1916 produced a little literature of their own, their own art, and even one song. These spontaneous products of a quick sympathy are not things which every community can hope to duplicate. Some of them can be reproduced, however, for the benefit of everyone. Minneapolis sends this verse:

BABY.

[Dedicated to "baby week."]

Wee mite of pinkness with rosebud face,
The dew of unborn ages on thine eyes,
The heritage of eons, and the prize
Of kings and prelates. At thine elfin grace
Empires fall. Close in her soft embrace,
Madonna-like, the mother sanctifies
Her earthborn babe in wide-eyed, rapt surmise,
Glimping in him the sluews of the race.

A wraith, a gem from out the great unknown,
 "A little bit of heaven" sent to men
 Down thro the rifts of blue, a blossom blown
 From fields of asphodel beyond our ken.
 Perchance the gates of heaven have 'slipped ajar,
 And thou, the Christ-child's gift, hast come afar.

The following was dedicated to baby week at Washington, D. C.:

THE BABY.

What does the baby ask of you,
 Passer-by in the street?
 Only the gift of a thought from you,
 Only the gift of a look from you
 At the road before his feet;
 Is it smooth and clean and fit, say you,
 Fit for a baby's feet?

What does the baby say to you,
 You who pay no heed?
 He begs for the right of living with you,
 Begs for the help of a hand from you—
 What he begs is but his need.
 Will the hand and the help be ready from you,
 Serving the baby's need?

What does the baby give to you,
 Men whose vision is dim?
 He gives you sun to lighten your way;
 He gives you hope for each dark day;
 Have you paid your debt to him?
 Have you smoothed his path and guided his way,
 Guarded and shielded him?

What does the baby keep for you—
 You whose need is vast?
 He keeps faith and hope and joy for you,
 Comfort and love and home for you
 In his tiny hand held fast.
 Are you earning the gifts he is keeping for you,
 You who are going past?

And the following poem by the same author was set to music by
 a Cleveland man:

FLAG DAY.

A new banner waves in our city to-day,
 A banner just newly unfurled;
 But the message it brings
 On its blue and white wings,
 Is as old as the dawn of the world.

Joyful the tidings this banner proclaims:
 "A baby lives here" is its song.
 To his presence give heed;
 Take account of his need:
 Make right for him all that is wrong.

From the dawn of the world to the dawn of to-day
 Man's hope in a baby has lain.

For the smile on his face
 Is the goal of the race—
 Through darkness and infinite pain.

We hail you—the babes of our city, to-day,
 And pledge you our faith to the end!
 Whatever your need
 With thought and with deed,
 Your uttermost realm to defend.

From the Kansas City Health Department comes this:

CHILD'S DECLARATION OF RIGHTS.

Every child has the right to belong to the aristocracy of health and intelligence; to be born with a good mind and a sound body.

Every child has the right to be loved; to have his individuality respected; to be trained wisely in body, mind, and soul; to be protected from disease, from evil influences, and evil persons; and to have a fair chance in life.

Every child has the right to be surrounded by that environment in which he may develop to the fullest his abilities and his talents.

The child is the asset of the State; he owes the State nothing.

For use in the kindergartens and among small school children is the following pledge, which was printed in color on a white card decorated with a quaint picture of a little girl and made an attractive souvenir:

BABIES' FRIENDS.

I pledge to be a baby's friend
 And everybody tell;
 Clean air, clean clothing, and clean food
 He needs to keep him well.

Unusually charming is the following apostrophe, widely quoted, but with authorship unrevealed:

I AM THE BABY.

I am the Baby.

I am the youngest Institution in the World—and the oldest.

The Earth is my Heritage when I come into being, and when I go I leave it to the next Generation of Babies.

My mission is to leave the Earth a better place than I found it.

With my million little Brothers and Sisters I can do this, if the World does not impose too many handicaps.

Now I need Pure Milk and Fresh Air and Play.

When I am a little older I shall need good Schools in which to learn the Lessons of Life.

I want to live, laugh, love, work, play.

I want to hear good music, read good books, see beautiful pictures.

I want to build Houses and Roads and Railroads and Cities.

I want to walk in the woods, bathe in the waters, and play in the snow.

I am Yesterday, To-day, and To-morrow.

If you will make my way easy now, I will help you when I grow up.

I am your hope—I AM THE BABY.

COOPERATION OF MERCHANTS AND OTHER BUSINESS MEN.

From the experience of towns and cities all over the country it appears that business men are just as ready as the newspaper editors to help make baby week a success. Here are a few of the unusual ways in which they helped:

An Alabama merchant gave away 1,000 copies of a standard book on the care of the baby. In two towns, in Maine and Ohio, savings banks reprinted a health-department bulletin on the same subject. Sometimes the managers of large plants cooperated by printing baby-week data on the pay envelopes. In one town the street-car company carried children free to and from the exhibit, and in a number of towns local dealers supplied free milk and biscuits to mothers and children at health conferences, lectures, and exhibits.

The proprietors of motion-picture houses frequently helped the baby-week committees in all sorts of ways. Slides and films on baby care were sometimes shown as part of the regular program. In one Oregon town the outing day closed with a complimentary performance for mothers. The proceeds of a performance in a Pennsylvania theater were contributed toward the expenses of the local baby week. In a New York town pictures of babies before and after the local child-welfare association had charge of them were shown by the courtesy of a motion-picture house.

Merchants often printed appropriate slips on baby care for inclosure with goods. In a Michigan city health notes were printed by a department store and distributed to customers over the counter. Department stores in many cities gave space for baby conferences and lectures and displayed large muslin signs advertising baby week on their delivery wagons. In a Missouri city a big dry goods firm constructed an auditorium especially for the baby-week lectures.

Most popular of all the means whereby the merchants and business houses helped were special displays of baby goods in their windows. An Indiana town reports an effective display of trained-nurse and baby dolls, while two California towns probably head the list for number and variety of displays. One of these reports that the cafés exhibited model lunches for children; the drug stores, toilet accessories; the hardware stores, a miniature play-ground; and dry goods houses, proper children's clothing. In a few places the use of one or more windows was turned over to the committee during baby week. In the window of a New Jersey hardware store, for example, the committee placed a proper baby scale, emphasizing the superiority of the balance-beam scale over the spring scale, and showed, in addition, a chart of the proper weight of the baby at different ages. Where the merchants cooperated with the committee by showing goods which were simple and wholesome, such window displays amounted to an extensive and valuable exhibit.

Baby week offered a great opportunity for advertisement, and this fact, while insuring the help and cooperation of business houses, brought with it many dangers, which are mentioned in various baby-week reports. In some towns the advertising features were so identified with baby week that the campaign was in danger of being considered a commercial advertising one. In other towns baby examinations arranged by the department stores without supervision by the baby-week committees were badly managed. In a few cases business firms exhibited in their windows articles not to be recommended. For instance, one committee reports, "Many of the drug stores made special displays, some, to our consternation, featuring pacifiers and soothing sirups." These cases show the necessity of the baby-week committee's holding up proper educational standards throughout.

FOLLOW-UP WORK.

In the nature of things follow-up work can not be reported upon immediately after the close of baby week. It is a matter which takes months to crystallize, and the full influence of such celebrations can never be reckoned in concrete form. It is not possible, therefore, to record here much of the work which has been undertaken in consequence of the baby weeks of 1916.

At least one State, Rhode Island, planned a State-wide follow-up program: The establishment of a division of child hygiene in the State health department, the enforcement of the birth-registration law, provision for the inspection and licensing of midwives, and the attempt to secure a law requiring tuberculin tests for cattle. A movement to secure in every community a trained health officer is also under way; and interest in the organizing of Little Mothers' Leagues in the public schools has been greatly stimulated. Already, it is reported, one city has passed a birth-registration ordinance and has appropriated \$700 for a baby census.

A State-wide follow-up program for New Jersey was placed before the women's clubs by the chairman of the health committee of the State federation of women's clubs:

The health committee asks you to concentrate upon the effort to make visiting nurses a part of the health equipment of every community; to place a woman upon every local board of health and upon the State board of health at Trenton.

Reference has already been made to the successful new plan for enforcing the birth-registration law in Cleveland; to the Ohio town which during baby week tried and convicted its own milk supply and has since started a vigorous reform movement; to the house-to-house canvass for unregistered babies made by the club women of New Orleans; and to the report from Wisconsin of a trained nurse

who is giving talks on baby hygiene to young girls in the continuation schools. The launching of a school center in a North Dakota township, the determination of a small town in Wisconsin to get a school nurse, the plans of an Alabama county to achieve perfect birth registration and have lessons on the care of babies and young children taught in the schools—all mentioned elsewhere—are typical of the follow-up activities of many communities.

In large cities in which infant-welfare work was already well established baby week obtained a fuller support for such activities. The account of the Boston campaign, on page 24, illustrates this type of follow-up work.

Similarly, from the nurses who organized the baby day in a Michigan county comes this report:

Our baby day in the small town where we planned to try out this new idea, with the hope that it would be adopted generally through the county another year, proved a grand success. It is the first public-health movement ever held there upon the town's own suggestion, and, incidentally, it is the community where our work was most strongly opposed. The success was a wonderful victory for us and there is already a gratifying return tidal wave.

A nurse retained by a manufacturing concern in a Rhode Island town states that her visits have been received and understood recently as they never were before the awakening interest brought by baby week.

To direct and conserve the interest and enthusiasm bred by baby week several towns appointed standing committees. For example, a Pennsylvania city reports the appointment of committees on Little Mothers' Leagues, milk stations, prenatal clinics and mothers' conferences, health and sanitation, recreation, survey and exhibits, and finance.

In many places the follow-up work consisted in establishing infant-welfare and milk stations. One town illustrates how baby week gave an impetus for the carrying on of an infant-welfare station by the health department. The chairman writes:

We have succeeded in arousing much interest in the community, and the board of health is about to start a welfare station. The woman's club has been asked to take part by its members assisting the doctor when examining babies and by showing mothers how to prepare food. Our town has approximately 40,000 inhabitants, and last year the board of health received absolutely no appropriation from the town council. This year they are to receive something. I am not sure about the amount, so will not state it. The welfare station will be started with no funds, and will show the necessity of having such a place for mothers to be instructed in the care of their children.

Many of the baby weeks led to a campaign for a public-health nurse or helped such a campaign already under way. For instance, an Alabama town reports that a petition for a nurse was circulated

after baby week; a Washington town, that the proposal to employ a county nurse met with new interest.

Other towns report that baby week brought a better understanding of public-health work already under way. For instance, in an Ohio town the public-health nurse has had a number of calls to give advice in prenatal cases—a new thing in her experience. From a Canadian city comes the following:

We have had the salary of our city child-welfare nurse increased and an assistant nurse placed under her. We have also established a free baby clinic in the city health department which is splendidly patronized.

Elsewhere follow-up programs took other forms, according to the needs of the community. In a Maine town the women's organizations undertook to raise funds to pay a small fee to the doctor for examining 920 children in the city and rural schools. A Michigan town, in which attention was turned to bad school conditions, as a result of baby week, has had all the school children physically examined; they report finding many cases of adenoids, enlarged tonsils, and defective sight, and great need for dental care. The local chapter of the Daughters of the American Revolution undertook to provide for the most urgent cases and started a publicity campaign to rectify the poor lighting and bad conditions in the school buildings.

In many communities Little Mothers' Leagues have been established. In a Pennsylvania town the superintendent of schools assures the baby-week chairman that instruction of the Little Mothers' Leagues will go into the regular school course another year.

From a town in Illinois comes this report of follow-up plans:

One achievement of this week has been the fact that we secured the interest of the doctors. They have never before recognized any merit in the work attempted by our women's organizations. It seems probable now that we shall have a mothers' institute, an organization which will have for its object the dissemination of information on health, right living, and disease prevention. Several doctors have signified their desire to help, and a dentist has offered his services. The tentative plan is to hold three two-day sessions—one in the fall discussing the prevention and care of bad-air diseases; one in the spring devoted to cleaning, fly campaigns, and contagious diseases; and one in early summer, when infant feeding and the care of foods in summer will be intelligently presented.

In New Jersey public-health officials are planning an outline for a course of study on baby health for the women's clubs. A Michigan town has started a night-school course for mothers. In a Missouri town a mothers' community club has been formed.

An Ohio town has launched a child-welfare association, which is starting its work with an antify campaign. A New England town is planning a survey by a sanitary expert; this town is also making

plans to knit the town and the surrounding country into a closer union and to raise the standard of efficiency among town officials. An Alabama town is concentrating on its dairy situation; it is making a campaign for pure milk and the eradication of the cattle tick. A North Dakota town is fighting tuberculosis and working for birth registration and stricter quarantine rules. A Pennsylvania town is exterminating its mosquitoes. A town which celebrated only one day in North Dakota decided on that day to give hot lunches to the school children and to begin buying playground apparatus. A Nebraska city which had a good permanent exhibit has been taking it from school to school for the instruction of mothers.



PART II. OUTLINE OF SUGGESTIONS FOR BABY-WEEK CAMPAIGNS.

PURPOSE AND GENERAL PLAN OF A BABY WEEK.

In addition to the description of campaigns contained in the foregoing pages, the following brief outline of practical suggestions may be useful.

The purpose of baby week, in general, is educational: To give to the parents of a community the opportunity of learning the facts with regard to the care of their babies, and to make known to a community the importance of its babies and the need of permanent work for their welfare and protection.

While the campaigns of 1917 will undoubtedly follow this general plan, it has been suggested that certain additions and modifications may be made.

The recent epidemic of infantile paralysis will of course modify the plans for baby week in any community in which such an epidemic has occurred, or where there seems any special reason to fear one. In such a community State and local health authorities should be consulted as to the form which baby week should take, especially before program features are included which involve bringing babies together. Among these features are baby parades, outings for mothers and babies, exhibits to which mothers bring their children, baby contests and conferences, etc.

In localities where there have been cases resulting in paralysis some demonstration of the methods of muscle training and other ways of restoring muscular activity will certainly prove of great interest. Systematic work in providing for all paralyzed children opportunity to secure proper after-care may form part of the follow-up work of such a baby week. Nowhere should the fact of the prevalence of infantile paralysis deter a community from a baby-week observance thus suited to the special conditions, since the celebration may be used to develop the public interest in infant welfare aroused by the epidemic. The statistics for the first 37 weeks of 1916 for New York City, where the epidemic was very pronounced, show that the baby death rate was actually lower during that time than it was for the same period of the year before, when there was no epidemic, and this improvement is ascribed to the popular response to

the precautions urged in the endeavor to meet the dangers of infantile paralysis.¹

It is suggested that the baby weeks throughout the country should not only emphasize the needs of young babies but should include those of all children under school age. This suggestion has been given in the following terms:

It requires only 12 months for a baby to become 1 year old and no longer subject to the hazards of infant mortality, but there are still many risks for him to encounter; he is still absolutely helpless, although increasingly charming, and his parents are as eager to keep him well and happy, as desirous of sound advice, as they were last year. Open out the 1917 baby week to include children still at home with their mothers.

Another subject which it would be desirable to include for consideration in baby week this year is the question of the need of better care for mothers before and at confinement. A study recently made by the Children's Bureau has shown that the welfare of babies can not be separated from that of their mothers, and has demonstrated the unregarded waste of women's lives at the very moment when they are most necessary to their children. Therefore communities may well consider, in connection with baby week, what must be done to provide better prenatal and obstetrical care for mothers.

Finally, this year as well as last, the most important part of baby week is the follow-up work to which it leads. Baby week should not be a temporary flurry and excitement, the effect of which is allowed soon to subside, but very definite efforts should be made to have it lead to permanent good for the babies of the community.

In the many communities which have already held one baby week of a general educational type a second celebration may well add to this general educational campaign particular emphasis on some one phase of infant-welfare work which is especially needed in the community, such as the establishment of a public nursing service, or an infant-welfare station, or a prenatal clinic, or a county center for maternal and infant welfare; the employment of a full-time health officer; the establishment of a division or bureau of child hygiene in the local health department; the improvement of the milk supply; the systematic after care of infantile paralysis; better birth registration, etc. Undoubtedly a great deal can be accomplished when the whole campaign is directed toward one end.

ORGANIZING A BABY WEEK.

Baby week should be a community campaign in which many organizations and individuals are asked to take part. One of the greatest benefits to be derived from baby week is the bringing together of many organizations for a common aim. Added to this is

¹ New York City Department of Health. Weekly Bulletin, Sept. 30, 1916, p. 314.

the fact that everyone has a far greater interest in work in which he has a definite part.

Some organization or individual must take the lead, however, in organizing a baby-week campaign. This may be a women's organization, the city department of health or other city officials, the local infant-welfare or visiting-nurse society, the chamber of commerce, or any other organization; or it may be some public-spirited individual.

In any case the first step should be to ask the cooperation of all agencies naturally interested in child welfare, as well as that of organizations representative of the varied interests of the community. The number and names of the cooperating organizations will vary greatly; in the larger towns and cities the list will ordinarily include the mayor and city officials; the city health department, especially its division of child hygiene or child welfare if this exists; all women's organizations; the school board and the principals and teachers of the schools; the local medical society; the local infant-welfare society; the local visiting-nurse society; the churches; all charitable organizations and settlements; the Camp Fire Girls; the Boy Scouts; the playground authorities; the newspapers; chamber of commerce; labor unions; fraternal orders; other men's organizations, etc.

A meeting of representatives of these organizations may be called to discuss plans for baby week and to take the first steps in organizing committees. The group which calls the meeting should have a clear idea to present as to a suitable time for holding baby week, certain results that it hopes to accomplish, the approximate amount of money that baby week is likely to cost, and in a general way the scope of the campaign.

In organizing a county campaign an effort should be made to obtain the help and interest not only of organizations in the county seat and other towns within the county but also of county organizations, such as the county medical society, the farmers' organizations, and organizations of rural women. All teachers of rural schools and the rural churches should be consulted in the campaign. Especially important is the cooperation of county officials, such as the county health officer and superintendent of schools.

In country districts the campaign may be one either of the county as a whole, of a small town with the country district surrounding it, of a township, or of a single neighborhood or school.

Committees.

Experience has shown that every community knows best how to organize its committees. For counties, smaller towns, and rural communities, the descriptions of the organization of the campaigns in 1916, on pages 14 to 23, will be suggestive. For larger towns and

cities the following outline of committees and their duties may be useful:

Executive committee.

Finance committee.

Program committees.

Committee on baby-welfare information.

Publicity committee.

Executive committee.—This committee should take the final responsibility in all matters of policy and detail of the campaign management. If it seems advisable to have a large committee, a few members, not more than seven, may be made a subcommittee with power to act on all matters of detail after the larger committee has adopted a general plan covering all the principal features of the campaign. At the close of the campaign the executive committee should not be dissolved until all the affairs of the campaign are finally settled and a committee on follow-up work is appointed.

The desirability of employing a director or executive secretary depends largely on the extensiveness of the campaign and the availability of a competent volunteer worker who will give full time to directing the work for a period of weeks. It is very important to have stenographic service for sending out directions to committees, requests for service and contributions, material for the newspapers, etc. The success of many of the publicity features, especially, depends on a generous amount of clerical work, part of which can of course be carried out by volunteer helpers.

Finance committee.—The finance committee should be appointed when it is decided to undertake the campaign. Methods for raising money for the campaign should be worked out on the lines which experience has shown are practicable in the community. (See p. 14.)

Program committees.—A separate committee should be in charge of each daily event (for instance, flag day) or special feature (such as baby-health conference).

Baby-welfare information.—A committee should be in charge of gathering facts as suggested in the section on "baby-welfare information."

Publicity.—In a small campaign probably one publicity committee can readily take charge of all the work. If the campaign is extensive, however, it would be advisable to have subcommittees, at least on press, printing, advertising, educational pamphlets, and talks. Much of the actual newspaper work would probably be done by the secretary, by a specially employed press representative, or by volunteers with newspaper experience who would agree either to prepare copy or to meet the reporters from day to day and give them material.

Time of holding baby week.

A baby week may be held at any time during the year as part of the nation-wide campaign. In some communities, on account of local conditions, the date fixed for the national campaign may not be as suitable as another date earlier or later.

In the larger cities and where the campaign is extensive it is well to allow several months for the preliminary work. The organizer of a very successful campaign in a large eastern city writes as his opinion: "Two or three months of preliminary time for preparatory work can be made to multiply the efficiency and permanency of the results."

COST.

The first question which will be asked is, What will baby week cost? but it is the most difficult to answer. The cost will depend on the extent of the campaign, on the features carried out, and especially on the degree to which the committee succeeds in obtaining service and materials free. Celebrations in 1916 proved that where general cooperation is obtained a baby week can be held at little or no expense.

Items which must be considered in carrying out a full baby-week program and which must be obtained either through money payments or by contribution are printed matter, including educational literature, postage, expressage, and rental on borrowed exhibits, construction of original exhibits, hall and office rent, lighting, etc.

In large cities the cost of employing a paid director will usually be well worth while and will save the confusion and waste growing out of undirected effort. The employment of stenographers may be found a wise economy even in many smaller places. A study of the cost of characteristic campaigns held in 1916 may be of help. (See pp. 14 to 26.)

DETAILS OF BABY-WEEK PROGRAMS.

The program for a baby-week celebration may include several or all of the following features:

1. A program of special days, lasting for a part or the whole of the week, including several of the following or others to be originated: Baby Sunday, flag day, fathers' day, school day, outing day, parade and visiting day, birth-registration day, permanent-organization day, etc.

2. Obtaining of baby-welfare information.

3. Infant-welfare exhibit.

4. Baby-health conference.

5. Meetings.

6. Plays.

7. Competitions in poster making and essay writing, mothers' contests, etc.

8. Publicity and education through newspapers, advertising, and the distribution of leaflets and pamphlets on the care of the baby.

9. Follow-up work.**Program for a baby day.**

In communities wishing to devote only a single day to the celebration the program may include any of the above features which can be easily carried out. The following program is suggested for a baby day:

1. Baby-health conference held during the morning and early afternoon.

2. A small exhibit, prepared locally, shown in connection with the conference.

3. An afternoon meeting for mothers.

4. Distribution of pamphlets on the care of the baby.

5. An evening meeting for everyone, with motion pictures or lantern slides, short talks, a play performed by children.

6. Articles in the newspapers.

7. A study, made before baby day, of birth registration in the community.

8. Follow-up work.

Or this simpler program:

1. A small exhibit shown in some central place; for instance, at the school or in the window of a general store.

2. A school celebration with essays or a play by the children.

3. An evening meeting at the school with lantern slides, a popular program, and a short address on the subject of baby day.

4. Articles in the daily or weekly newspaper.

5. Follow-up work.

Program of days.

The feature of baby week that affords the best opportunity for securing good newspaper publicity and for enlisting large numbers of volunteer workers is a series of special events for each day in the week. Committees may find helpful the descriptions of various "days" celebrated last year. (See pp. 35 to 43.) With regard to plans for a few of the days the following suggestions may be useful.

FLAG DAY.

On this day, which may come on the Saturday before baby week opens, or on Monday, banners are distributed to the homes of all.

babies under 1 year of age. In some smaller communities it may seem wise to include the homes of all children under 6 years.

The banners used may be small American flags, or they may be made up very cheaply of muslin, with some baby-week slogan or emblem printed in appropriate colors. A good size for the banner is 18 inches long by 12 inches wide, with a stick long enough to be tacked to a window frame. Novelty makers or printers can make these banners.

The names and addresses of the babies may be obtained in various ways. A list of all babies whose births have been registered during the last year may be obtained from the local registrar, who must be asked to check the birth-registration with the death-registration list, so that no flags will be sent to homes where babies have died. Frequently those delivering the flags according to such a list will find babies whose births have not been registered. They will of course deliver the flags to these homes, and they should be instructed to report the names and addresses of these unregistered babies to the committee or to the registrar, so that they may be properly recorded.

Where a house-to-house birth-registration canvass has been made before baby week the lists obtained can be used for the flag distribution.

Delivery of the flags may be made by committees of women assisted by committees of boys. It is a good thing to have the boys carry small hammers and tacks, so that they can put the pennants in place when the householders are willing. With each pennant should be delivered a program of the local baby week, and a leaflet on the care of the baby. Special announcements of the infant-welfare exhibit or of the baby-health conference, if these are held, should also be distributed.

All those who are distributing flags must be able to give a clear and brief explanation of baby week and flag day.

The preparations for flag day in a large city require considerable care and plenty of time. Several days in advance a central committee on flag day should obtain from the health department the names and addresses of the registered babies. These will then be sorted by districts and the appropriate number of flags sent to the various headquarters from which the district teams will start out to make the distribution.

One of the elements in making flag day a success is a generous notice of it in the press, both the day before and on the morning of flag day. If there are papers printed in foreign languages, particular care should be taken to see that they publish beforehand an explanation of flag day.

BABY SUNDAY.

Baby Sunday may come at the beginning or at the end of baby week.

The committee in charge of this part of the campaign should secure a list of the leaders of the religious bodies of the community.

Some communities may wish to ask all of these to preach on baby week or baby welfare on that day. If this is undertaken, members of the committee should call upon or write to each one who is asked to preach, and explain the purpose of baby week. In order to aid in the preparation of special sermons an outline of information on the subject of baby week should be furnished. In the appendix, page 109, will be found considerable material upon the subject of infant welfare and baby week, which may be incorporated in such an outline.

In any event there will probably be a general response to a request to give notice of the program of baby week on Baby Sunday, and to explain the purpose of the observance. The experience of the 1916 campaign in observing Baby Sunday is given on page 36.

Meetings to sum up the work and teachings of baby week may be held on the afternoon of the Sunday closing baby week. Church societies, whether of men or of women, may arrange that their meetings held during the week shall include a short discussion of the subject. The discussion should have as a leader some one with special knowledge of baby welfare. Suggestions for programs are given on page 91.

FATHERS' DAY.

Suggestions for fathers' day will be found on page 36.

OUTING DAY.

If the weather permits, an outing day for mothers and babies forms an attractive feature. This may take the form of an automobile ride, a morning or an afternoon spent in the park, or an excursion on the water. If it is possible, an alternative indoor program for bad weather should be planned.

VISITING DAY AND PARADES.

For this day the committee may arrange a tour of inspection of all the places where any work is done for babies, such as infant-welfare stations, day nurseries, or baby hospitals. Such a day is very important in communities where infant-welfare work has been begun, either by the health department or by private organizations, and it is desirable that the public shall know more about the work that is being done and the need for developing it. City officials and representatives of men's organizations and of societies for civic and mutual benefit should be invited to take part in the tour.

This tour of inspection may be combined with a parade. Various types of parades are suggested on page 37. This year it should be remembered that a parade of babies is one of the features bringing babies together, which it is unwise to include where an epidemic of infantile paralysis has occurred recently.

In arranging parades every effort should be made to avoid overtaxing the strength of mothers and young children. The most comfortable parades are those in which automobiles are furnished for all mothers and babies. An important feature which should not be overlooked in plans for a baby parade is the policing. Definite arrangements should be made for the special policing of street corners, etc., and should be published in advance in the papers, so that mothers will feel reassured.

SCHOOL DAY.

On one day during the week special exercises may be held in the schools throughout the city. These may be arranged as a regular part of the school work or as an afternoon entertainment to which parents are invited. Programs and ideas for contests for children are given on pages 38 and 51. Where prizes are offered they should be extremely simple. Plays have proved a very successful feature of school celebrations. (See pp. 54 and 134.)

In schools where Little Mothers' Leagues (see p. 98) are organized the program may consist of compositions and demonstrations by members of these leagues and of talks by their teachers. If no Little Mothers' Leagues are at present organized, the school day may afford an opportunity for starting them.

The Baby-Week Manual, issued by the committee on meetings and demonstrations of the New York City Baby Week Committee of 1916 for use in the schools, gives many excellent suggestions for essays, programs, etc. Sample copies of this manual may be obtained on application to the department of health, New York City. This department will give permission to any community to reprint the manual in full, provided credit is given to the New York City baby week.

BIRTH-REGISTRATION DAY.

It may be well worth while to concentrate attention for one day on the importance of having all births registered. Many admirable methods of making interesting the subject of better birth registration were worked out this year through the ingenuity of committees and health officers. These are referred to on page 42.

Some committees may decide to make a preliminary investigation of the completeness of birth registration, so that a report can be presented on birth-registration day. (See pp. 43, 78, and 98.)

In several States, and in some cities in other States, the registration authorities send a card or certificate of notification to the parents when a birth is registered. This practice is helpful not only because it gives parents a document which may be preserved with as much care as a marriage certificate, but because it tends to bring about improvement in birth registration. The baby-week campaign would be a good occasion to emphasize the importance of having this notification sent out.

Local newspapers should be furnished with articles or material for articles on birth registration, in which incidents showing the practical value of birth registration should be included. The State and local health officers and in some cases State college or university authorities can be helpful in supplying the data. The Children's Bureau will furnish, on application, press material on this subject.¹

BABY-WELFARE INFORMATION.

One of the most important parts of a baby-week campaign is the gathering of accurate information not only upon local birth registration, but also as to the death rate of babies and the community conditions especially affecting them.

This information can be used in the campaign in a variety of ways—for the preparation of exhibit material, for newspaper stories, for printed matter, and for speeches throughout the campaign.

Birth registration.

Different plans may be followed in making studies of the local birth registration. Among those which have been carried out successfully are a house-to-house canvass of a whole city or town; a house-to-house canvass of a limited district; an investigation of a selected list of births. A leaflet giving full directions for carrying out a birth-registration test according to these or other methods will be sent on application to the Children's Bureau.

Baby death rate.

The committee in charge of obtaining this information should include in its membership the local health officer and registrar. In most communities, on account of the lack of complete birth registration, accurate data with regard to the baby death rate can not be obtained. Where complete canvasses of births are made, as above suggested, these will supplement the official records of births. The facts as disclosed by the records, however incomplete, should be studied.

¹ See also U. S. Children's Bureau. *Birth Registration: An aid in protecting the lives and rights of children.* Bureau publication No. 2.

The following figures should be compiled:

(a) The number of live births during the last calendar year of which records are obtainable at the time of the campaign.

(b) The number of deaths of babies under 1 year of age during that year.

(c) The baby death rate, or infant mortality rate, which is the relation between the two. The rate is expressed as the number of deaths of babies under 1 year of age per 1,000 live births during the same year. Although in the smaller communities the number of babies born alive during a year may not reach 1,000, the rate is still given in terms of the number of deaths per 1,000 live births. For instance, if the number of babies born alive during the year is 200, while the number of babies under 1 year of age dying during the year is 25, the baby death rate will be 125 per 1,000.

(d) The number of babies under 1 year of age who died during the year from all causes; also the number of babies' deaths and the percentage of the total number of babies' deaths assigned to each of certain important causes, such as diarrhea and enteritis, congenital diseases and diseases of early infancy, and respiratory diseases.¹

These figures, when compiled, will show what is the most important cause of death among the babies in the community and will point to that factor which should be attacked first in an attempt to lower the baby death rate. For instance, one community may find that the majority of its deaths of babies under 1 year are due to diarrhea and enteritis occurring in the summer months. This fact points to the special need of infant-welfare stations, the instructive work of visiting nurses, and, possibly, of improvements in the milk supply, for it has been definitely proved that through these means diarrhea and enteritis among babies can be largely prevented.

Another community may find that few babies die from these diseases, but that congenital diseases and diseases of early infancy are to blame for the majority of the deaths. Here evidently there is need for better prenatal and obstetrical care given by physicians and nurses and for community measures for supplying them.

In smaller communities, where the figures upon which rates for one year must be based are very small, it will be better to use the figures not for one year only but for a period of three or five years.

¹ Figures compiled at the Children's Bureau from the tables published by the United States Bureau of the Census give the following distribution of infant deaths according to these three causes. These percentages are based on the average annual number of infant deaths for the five-year period 1908 to 1912 and relate to the States which were in the death-registration area in 1910: Diarrhea and enteritis, 25.6 per cent of all deaths under 1 year of age; congenital diseases and diseases of early infancy, including congenital malformations, congenital debility and premature birth, atrophy and marasmus, injuries at birth, and other conditions peculiar to early infancy, 34.8 per cent; respiratory diseases, including acute bronchitis, broncho-pneumonia, and pneumonia, 14.9 per cent; all other causes, 24.7 per cent.

A useful method of studying and portraying conditions in the community is through the preparation of two spot maps, one showing the location of the births and the other that of the deaths of the babies during the year or period studied, or one map may be prepared giving both the births and deaths in different colors. This will show graphically in which part of the community the largest number of babies die and will give evidence as to the general conditions leading to an excessive death rate. Maps for this purpose should be large and should contain very little detail. The spots should be made at the location of the address where the birth or death occurred. The spots may be drawn by hand or put on with a rubber stamp or they may be represented by short pins with colored heads.

Where a study of the figures can not be made locally, information with regard to the local baby death rate may be obtained by applying to the State health officer or the State registrar of vital statistics.

Baby-welfare work.

A study should be made of what baby-welfare work is being done by the department of health or by private organizations, with the object of pointing out the further needs of the community. This would include studies of:

(a) Infant-welfare or milk stations or other types of permanent stations.

(b) Work by visiting or public-health nurses.

(c) Prenatal care and proper obstetrical and nursing care of mothers.

(d) Educational work by pamphlets, lectures, etc.

(e) Provision for sick babies at hospitals.

(f) Summer camps or tents for babies.

(g) Work done for the prevention of blindness among babies, including laws or ordinances and their enforcement.

Community conditions.

A study may be made of the local milk supply or of the other sanitary conditions of the community which affect the baby, such as water supply, housing conditions, disposal of garbage and sewage, etc. (See p. 44.)

These studies may form part of the program of women's organizations during the winter.

If such studies can not be made preparatory to baby week, they may be included in follow-up work. (See p. 99.)

BABY-WELFARE EXHIBIT.

In the 1916 campaign an exhibit proved to be one of the most popular features of baby week. In arranging any exhibit to which mothers are allowed to bring babies or young children the State or local health authorities should be consulted as to whether the danger of any epidemic, especially one of infantile paralysis, renders such an exhibit inadvisable. (See p. 69.)

An exhibit may be used in many different ways.

1. It may be shown in connection with a baby-health conference or a meeting.

2. An exhibit may be the main feature of a central headquarters, combined with plays, meetings, or motion pictures. In this case practically all the publicity will be directed toward bringing people to the central place, and the methods will follow those used in conducting any social-welfare exhibit.¹

3. Many small exhibits may be shown during baby week in different centers in a large city.

4. An exhibit prepared for baby week may be used later as a lending exhibit throughout a circuit. Such a circuit may be a series of centers in one large city or all the towns or the district schools of a county or all the towns in one section of a State.

5. An ingenious plan is to obtain the consent of merchants to arrange small exhibits in their windows in which suitable articles from their own stock will appear.

Different features which may be included in an exhibit are wall panels, exhibits of objects, and demonstrations.

Subject matter of an exhibit.

Many different subjects may be treated in a baby-welfare exhibit, but they should be kept distinct through the arrangement of the exhibit.

Among subjects which may be included are:

1. Care of child and mother.

Care of the baby.

Feeding—breast feeding, artificial feeding.

Clothing.

Fresh air, bathing, routine care.

Care of the child up to school age.

Feeding.

Clothing.

Play.

¹ See U. S. Children's Bureau. Child-Welfare Exhibits: Types and preparation. Bureau publication No. 14.

1. Care of child and mother—Continued.
 - Care of the mother.
 - Prenatal care.
 - Care at confinement.
 - Care of children with paralyzed muscles.
 - Muscle training, etc.
2. Community conditions.
 - Birth registration.
 - Baby death rate.
 - Contagious disease— including infantile paralysis.
 - Milk supply.
 - Water supply.
3. Community needs.
 - Infant-welfare stations.
 - Public-health nurses for infant-welfare and prenatal work.
 - Larger appropriation for public-health work.
 - Public outdoor recreation.
 - Improvement in birth registration and in sanitary conditions—milk supply, housing, etc.

Securing exhibit material.

Exhibit material may be bought, rented, borrowed, or prepared locally. In general the most successful exhibits combine material which is prepared locally with that which is obtained in other ways.

Many State boards of health and extension departments of State universities and agricultural colleges have exhibit material which they will send out through the State to any organization paying transportation. On pages 121 to 131 of the appendix will be found a list of material available from these sources in various States. These departments are adding rapidly to their supply of exhibit material; therefore it would be worth while to make application to such State agencies for exhibit material even in cases where the agencies do not appear in this list.

Several national organizations and Federal departments have traveling exhibits on infant-welfare subjects. For a list of these organizations and departments and for details regarding their exhibit material, see appendix, pages 117 to 121.

It is well to make application for this material as long in advance as possible, as last year proved that there was an overwhelming demand at the last moment for all available material.

MAKING WALL PANELS.

If no exhibit material on the care of infants in the form of wall panels is found to be available, the exhibit committee may wish to

prepare their own panels. In any case, most committees will wish to include panels illustrating local needs and conditions. Reproductions of a few typical panels on the care of babies are given in the appendix to Child-Welfare Exhibits. Committees may find it practical to copy these panels or others of which they can obtain reproductions, using photographs or pictures from magazines for the illustrations. In the appendix to this bulletin, page 116, are given lists of the subjects of the panels in several infant-welfare exhibits. In preparing material it is well to remember that it is best not to attempt to include too much on one panel and that each panel should be on one subject or idea and should not be a miscellaneous collection of statements and pictures.

A small temporary exhibit may be made at slight expense, if cheap materials are used. In a temporary exhibit there is no need of framing the panels. They should, however, have a border painted in a color contrasting with that of the panel. A good size for a large panel is 3 by 5 feet, the panel being hung 20 to 30 inches off the floor.

The material of which panels may be made will vary somewhat with the size, and panels which are to have photographs pasted upon them need a stiffer ground than others. For larger panels the materials most generally available are beaver board, Upson board, and compo board. For smaller panels corrugated strawboard, heavy cardboard, and binder's board may be used. The last two are usually obtainable in all communities.

Plain upright letters are best, varying in height from three-fourths of an inch to 2 to 3 inches for special display. The type of lettering known as gothic is very clear and easily read. On some tinted backgrounds lettering may be done in both white and black letters. A color variation for important words or to lend variety is desirable when used in moderation. It is well to remember that the cheap red which produces a glare is ineffective.

Lettering is done best by a sign painter, if this expense can be incurred. The best substitute method is the use of pasted paper letters. These paper letters, with gummed backs, may be ordered at stationery shops. The lettering should be planned by a person with a sense of artistic balance, and pasted letters should be put on with great care.

A suggestion for making inexpensive panels is given on page 17.

Panels are much more attractive and interesting if they are illustrated by photographs, drawings, colored pictures, or maps. It is well, however, to avoid the use of diagrams and charts that require close study. Photographs should be enlarged to at least 10 by 12 inches to be effective.

EXHIBIT OF OBJECTS.

1. An interesting part of an infant-welfare exhibit is a collection of model articles for use in the care of the baby. These may be borrowed from the stores, but they should be carefully chosen by the committee. The exhibit should include outfits at minimum cost and homemade substitutes. Exhibits in miniature of tiny dolls with clothing, furniture, etc., are attractive. They are especially useful in small exhibits to be sent from place to place. The exhibit may include proper clothing, sleeping and bathing arrangements, and articles used in the modification of milk and preparation of food for older children. (See Appendix, pp. 114 to 115, for a list of articles forming part of the exhibit on infant care at the exhibit of the Children's Bureau, Panama-Pacific Exposition, and for other articles which may be used. See, also, p. 47 and illus. Nos. 12 and 13 for description and pictures of good exhibits of this kind.)

2. Articles which are injurious to the baby may be shown, such as pacifiers, soothing sirups, etc.

3. Proper food for children up to 6 years may be shown, including model meals for a day, school lunches of the Do Care and Don't Care families, and market baskets of the same two families.

4. A model infant-welfare station may form part of the exhibit.

5. Models showing good and bad dairies, methods of fly prevention, and methods of preventing water contamination are always of interest.

6. Homes of the Do Care and Don't Care families. (See Appendix, p. 116.)

Further suggestions for exhibits will be found on pages 45 to 49 and in the section on typical local campaigns.

DEMONSTRATIONS.

An exhibit which involves the activity of human beings is always more attractive than one composed solely of objects or wall panels.¹

Demonstrations on the care of the baby may consist of:

Preparation of modified milk.

Preparation of food for older babies, 1 to 6 years.

Bathing the baby.

Dressing the baby, showing proper costume in summer and winter.

Protection from flies, etc.

The use of homemade appliances—home pasteurizer, fireless cooker, iceless refrigerator, etc.

¹ See U. S. Children's Bureau. Child Welfare Exhibits: Types and preparation. Bureau publication No. 14, p. 42.

Demonstrations of infant-welfare work may show the work of an infant-welfare or milk station and of public-health nurses.

Demonstration of muscle training for children with paralyzed muscles may be arranged by orthopedic surgeons.

See page 45 for descriptions of successful demonstrations.

Explainers.

Explainers, whose task is to draw in visitors to the exhibit as well as to explain its details, are desirable for any exhibit.¹

They are especially important for a small infant-welfare exhibit. Arrangements should be made to have at least one explainer continually at each section of the exhibit. All explainers should receive instruction in the subject matter of the exhibit from a representative of the committee which has arranged it; meetings of the explainers once or twice during the week, at which they may ask advice with regard to questions which have puzzled them, may be of advantage.

Nurses are the best explainers at an infant-welfare exhibit, particularly if it is largely on the care of babies. Besides explaining the panels they may give demonstrations in the preparation of milk, in bathing the baby, etc.

Publicity about the exhibit.

It is essential that the exhibit be given proper publicity. The publicity committee of the baby week will have this in charge, but the exhibit committee will have to see that correct information with regard to the exhibit is furnished to the committee on publicity.

If an exhibit on the care of infants has been prepared, a special effort must be made to bring to the exhibit the mothers of the community; if one on the need for infant-welfare work has been arranged, those organizations and individuals who will be useful in helping such a movement should if possible be brought to the exhibit. Different methods must be devised in order to reach different types of people. In Pittsburgh many mothers were invited through their children in school; personally conducted parties were organized in different neighborhoods and taken to the exhibit.

Additional information which will be useful to those planning an exhibit may be obtained from Child-Welfare Exhibits, Children's Bureau publication No. 14; Report of the Philadelphia Baby-Saving Show, Child Federation, Witherspoon Building, Philadelphia, Pa.; How to Use an Exhibit, Board of Health of the State of New Jersey, Trenton, N. J.; A B C's of Exhibit Making, Department of Surveys and Exhibits, Russell Sage Foundation, 130 East Twenty-second Street, New York, N. Y.

¹ U. S. Children's Bureau. Child Welfare Exhibits: Types and preparation. Bureau publication No. 14, p. 42.

BABY-HEALTH CONFERENCES.

"Living features"—that is, features in which grown people, children, or babies take part—are the most interesting divisions of any exhibit or celebration. In a baby-week campaign much of the work is necessarily of this character. The committees are centers of activity and arrange the many features which have been suggested in this bulletin—celebrations by school children, parades, outings, etc. The whole campaign, however, revolves about the baby himself; he is its most interesting feature.

Various types of what may in general be called baby-health conferences have been devised; all have one common aim, to focus attention on the individual baby. There is a growing tendency to minimize the competitive element in these events and to make the conference of assistance to the mothers of the babies examined by pointing out the needs of each baby and the ways by which his physical condition may be bettered. It has been well said that contests in the past have done good in calling attention to the need and the possibility of upgrading the American child. But the contest attracts only the prospective prize winner and leaves out the great rank and file.

A baby-health conference, moreover, is a demonstration to all the people of a community of the value of a periodic physical examination for all babies as well as for older children and the value of guidance to mothers in the care of their babies. The conference may therefore be a potent means of showing to a community how such examinations may be carried on and the benefits of such work in "keeping the well baby well." The organization of infant-welfare or milk stations or other forms of permanent stations often follows the holding of such conferences.

It is to be noted especially that as baby-health conferences involve bringing babies together they are included among those features of baby week discussed on page 69. It is there stated that in a community in which an epidemic of infantile paralysis has occurred recently the State and local health officers should be consulted before a feature of this sort is included in the program for baby week.

A conference is best combined with a small infant-welfare exhibit. Held in conjunction with an exhibit on the care of babies, it shows the practical application of the advice given on the panels; while if the exhibit deals with the need of the community for infant-welfare or milk stations, the conference illustrates the methods and benefits of such work.

All the different forms of conferences to be described have in common the following features: Thorough physical examination of the babies by competent physicians according to some definitely out-

lined plan, a record of the examination being given to the parents; personal interviews between physicians and parents, in which the needs of the baby are pointed out and the general hygiene best suited to the baby under consideration is dwelt upon. No treatment or prescriptions are given; where there is need for either, reference is made to the family physician or dentist, to specialists, or, where the parents can not afford private care, to clinics and hospitals. The information given to the mother with regard to the proper care of her baby is much strengthened by reference to the exhibit material of the infant-welfare exhibit, by demonstrations and lectures (with lantern slides) on the subject, and by the giving out of bulletins and leaflets. The help of nurses is an important feature.

Conditions for the conference which are safe and comfortable for the baby must be provided. Of the utmost importance is the careful making of appointments beforehand for the conference. Where babies are examined only by appointment the dangers and discomforts of children collecting in crowds can be avoided.

Baby-health conference without score card.

This type of conference has been held as part of a children's health conference at Knoxville, Atlanta, Jacksonville, Toledo, Peoria, at the exhibit of the Children's Bureau at the Panama-Pacific Exposition, and during the past year in connection with baby week in many communities.

In these conferences a full physical examination, including one of the eyes, nose, and throat, is made of each baby; a printed blank is filled out, giving the results of the examination and notes with regard to the individual needs of each baby. This record sheet is given to the mother. If treatment or medicine is needed, the mother is referred, as above stated, to her private physician, to a specialist, or to other sources of help, as the case requires. No score card is used.

The record sheet used instead of a score card in these conferences gives space for notes on the age, height, weight, previous history, and any physical defects found in the physical examination. It has a page on which the examining physician gives advice to the mother on the general hygiene necessary to better the physical condition of the baby or to keep the baby well. In a conference of this type no attempt is made to compare the development or condition of different babies; the object of the conference is rather to center the attention of the mother on the qualities and needs of her own child, to teach in a practical way the facts with regard to the care of babies, and to point out the sources of assistance in making or keeping the baby well. These purposes should be made plain in the publicity material given out.

Any simple form of record sheet which is decided upon by the medical staff of the conference and which gives space for notes on the physical condition of the child and notes on hygiene may be used.

On pages 132 and 133 of the appendix is reproduced a copy of the record sheet used by the Children's Bureau, filled out for a typical case. This record sheet has been reprinted by the American Medical Association and may be obtained on application to the secretary of the council on health and public instruction, 535 North Dearborn Street, Chicago, Ill.

A pamphlet of instructions for committees planning baby-health conferences or children's health conferences of this type can be obtained on application to the Children's Bureau.

Baby-health conference with score card.

In such a conference the physical condition of the baby examined is recorded on a score card. For each defect found a certain amount is deducted from the perfect score of 100. When the examination is finished and the score computed the latter expresses the general physical condition and development of the child. Many successful conferences have been held throughout the country during the past few years according to this method. The American Medical Association has prepared a standard score card which may be obtained for use at baby-health conferences. This organization has also prepared a pamphlet giving instructions for organizations wishing to conduct a baby-health conference according to this score card, suggestions on the use of the score card to physicians making the examinations, and suggestions upon the computation of the score. (See Appendix, p. 119.) Sample copies and a price list of score card, pamphlet, and anthropometric table may be obtained on application to the secretary of the council on health and public instruction, 535 North Dearborn Street, Chicago, Ill.

Baby-improvement contest.

Another form of baby-health conference is that in which the babies are first examined and scored as in the above conference, and after an interval (1 to 12 months) are again examined and scored and a diploma, medal, or prize is given to the babies showing the greatest improvement in score. The following resolutions were adopted by the Council on Health and Public Instruction of the American Medical Association, February 24, 1914:

That if the awarding of any medals or prizes seems judicious in the baby-health conferences, they shall be given to the babies showing the greatest improvement in health between the various examinations rather than to the naturally healthy child who scores high at the first examination.

A baby-improvement contest was held by the Child Federation of Philadelphia in 1914. In this contest the babies examined and scored at the first examinations were kept under observation for four weeks and their homes were visited at frequent intervals by trained nurses. At the end of this time the babies were again examined and scored. The final score, upon which prizes were awarded, was based 50 per cent on the improvement shown in the physical condition of the baby between the two examinations and 50 per cent on the improvement shown in the cleanliness and general sanitation of the home, the care of the baby in the home, and the degree of cooperation shown by the mother. At the close of the first examination the physician prepared a slip containing the special form of instruction he desired the mother to have, and this was given to the visiting nurse having the case in charge.

Many organizations have held baby-health conferences according to a score card and a year later have held improvement contests in which the same babies entered for a second examination. In many baby weeks in 1916 the first examination in a baby-improvement contest was a feature.

COMPETITIONS OF VARIOUS KINDS.

Suggestions for competitions of various kinds may be drawn from reports of baby weeks on pages 51 to 53. When a prize seems desirable or necessary, it should be extremely simple.

For a better-mother competition a local newspaper may be glad to offer a small prize for the best letter on the care of the baby, written in answer to a series of questions published in the paper at the opening of the competition. After the letters are judged and the prizes awarded many of the best letters could be published. A committee composed of physicians and nurses should be given charge of drawing up the questions and judging the replies.

MEETINGS.

Mass meeting or rally.

A mass meeting may well form a useful feature of baby week, especially in smaller communities. It may be held at the beginning or end of the campaign. The committee in charge of this meeting undoubtedly will be able to secure free some public hall, theater, or school. It is well to choose a place barely large enough to accommodate the size of audience which may reasonably be expected to attend. A meeting which fills a small hall, even to overcrowding, is more inspiring than one in a large hall which is half empty.

A suitable presiding officer should be chosen. An interesting speaker from another city may be secured for the mass meeting;

many State departments of health are able, on application, to send out a speaker if his expenses are paid. Short talks by representative people of the community should be included. The talks at this meeting should be on subjects of general interest. Such subjects as "The purpose of baby week," "What a city owes its babies," "After baby week, what?" "This community's baby death rate," and "What other cities have done for their babies" may be included. Technical and medical subjects are not appropriate for a mass meeting.

It is well to advertise some features for such a meeting which will attract a popular audience. Lantern slides and motion pictures serve this purpose. In addition some popular numbers may well be added to the program.

It takes time, trouble, and thought to insure a good audience for a mass meeting. Moree¹ has recently called attention to "Mass meetings that failed to mass" in an article which gives many excellent suggestions for securing a large attendance. Committees in each community will need to work out their own methods of gaining an audience. Several expedients were used successfully in 1916. (See p. 53.) A few suggestions may be added:

Ample newspaper publicity is of primary importance. If a well-known speaker from away is to address the meeting, an outline of his speech should be secured and given to the newspapers in advance of the meeting, with his photograph, if possible, and a brief note as to his position, writings, etc. In some cases it is worth while to insert paid advertisements of a meeting.

Notice of the meeting may be given out in the churches and at meetings of societies. A large committee can divide a list of names and call on or telephone to each one on the list. In distributing tickets or printed notices or invitations care may well be taken to reach, by mail or otherwise, the members of all organizations, including civic associations, lodges, labor unions, churches, and church societies. Parents of school children should always be reached in some fashion. In addressing lists for notices of any kind, careful checking will avoid duplication.

It is well to remember that the more kinds of publicity a meeting receives the more people will be likely to come.

The choice of the program is of course the most important part of gaining an audience. Plays, tableaux, pageants, or choruses in which a large number of children or adults take part always insure a good audience of the relatives and friends of the performers.

In case the community is a center for a surrounding rural population every effort should be made to secure the presence of people from the country.

¹ Moree, E. A. "Making a meeting effective." *American Journal of Public Health*, January, 1916, vol. 6, p. 28.

Informal meetings.

These are very desirable in connection with the exhibit or the health conference; in large cities it is well to plan such meetings at many different centers throughout the city in settlement houses, public halls, or schools. Informal meetings may be held in the afternoon for mothers especially, or they may be evening meetings for parents. The programs may include brief talks, music, stereopticon slides, and possibly motion pictures. In such meetings also the short plays or tableaux may be used.

TALKS AT MEETINGS OF CLUBS AND SOCIETIES.

A special effort may be made to have each organization which meets during the week devote part or all of the meeting to discussion or talks on subjects related to baby welfare. In communities where it has been decided that it is impossible to send out messages to individual fathers a copy of such a message may be sent to each men's organization in the community with the request that the message be read at a meeting of the organization if such occurs during the week. (See p. 138.) A similar message to women's organizations may be prepared and sent to each women's organization with the request that an informal discussion of the problems and lessons of baby week be included with the reading of the message. The following are a few suggested topics for discussion:

How can this community better the conditions of the babies?

What can this society do to improve conditions for the babies?

Birth registration.

Infant-welfare work: Infant-welfare stations, public-health or visiting nurses, and what they have done for babies in other communities.

Rural public-health nurses.

The Children's Bureau has an outline of suggestions for programs on "The community and the child" which includes a list of references and may be of service in this connection. Copies will be sent free of charge on application.

Lantern slides.

Slides illustrating the care of babies, and also different types of welfare work, may be prepared locally or may be borrowed from various sources. Many State boards of health and extension divisions of State universities have sets of lantern slides on appropriate subjects which they send out with or without outlines for an accompanying lecture if the cost of transportation is paid and broken slides are replaced. See Appendix, page 121, for a list of available material of this type for each State.

In addition lantern slides may be bought, rented, or borrowed from other sources. (See Appendix, pp. 117 to 121.)

Motion pictures.

While motion pictures are among the most popular forms of education and many communities desire to use them, unfortunately at present there do not seem to be enough films available on baby welfare, either from commercial exchanges or private organizations, to make up a list that would be useful. Comparatively few films have been produced on subjects pertaining to baby welfare, and some of these are not easily obtainable. The Children's Bureau, on request, will give as much information as possible in relation to available motion pictures and films.

Plays.

Plays in which children take part may be given at school as part of school celebrations or parents' meetings, at settlement houses or other neighborhood centers, at the campaign center, or at the exhibit. They are valuable in giving interest to a large evening meeting.

In producing the plays it is well to have a number of different casts trained to act the same play. The larger number of children taking part will interest more of the parents in seeing the production and will make it possible to give many more performances, as it is not desirable to have the same group of children take part every day during baby week.

Some committees may prefer to use original plays by local writers. Tableaux and pageants may be originated to suit local conditions. A number of health plays for children are available. They are listed on page 134 of the appendix, with an outline of the story, number of characters, and the necessary costumes and stage setting.

PAMPHLETS ON BABY WELFARE.

The opportunity to distribute educational pamphlets and leaflets on the care of the child and the mother is a very important feature of baby week. These can be distributed in many ways—at an exhibit, at a children's health conference, at meetings for mothers, or with the flags on flag day. (See pp. 36 and 55.) An effort should be made, however, not to waste the material. In most cases the leaflets and pamphlets on baby and child care, prenatal care, and infantile paralysis, as well as on after-care of paralyzed muscles, will not need to be printed locally. Many city and State departments

of health and certain Federal departments have prepared such material for distribution free of charge or at a small cost. Lists are given on page 117 of the Federal departments and national organizations from which pamphlets may be obtained, and on page 121 of the State agencies furnishing such material.

PUBLICITY.

Newspapers.

The chief avenue of publicity is, of course, the daily papers. In almost any community the cordial cooperation of the newspapers may be counted upon. It is due the newspaper, however, that the committees planning the campaign furnish material that is really "news" and that they make their campaign so interesting that people are glad to read about it. Probably the first step is for the committee to confer with the editors of the daily papers and receive their suggestions as to the methods to be pursued in supplying material. The employment of a press agent depends largely on the question of funds and the availability of some one who can write up the material both sympathetically and in a readable manner.

Following are some suggestions for newspaper publicity:

First. A news story when the baby week is first decided upon, followed by other stories at intervals, and daily stories during baby week.

Second. A special department in one or more papers during baby week, such as a series of articles on the care of babies, a question-and-answer department, or a series of stories on baby-welfare work and the local conditions and plans.

Third. Newspaper syndicates, syndicates sending out material in matrix form, and ready-print companies may have material with definite release dates on these subjects which they are ready to furnish to editors.

Fourth. The Children's Bureau will send on application articles on various subjects connected with baby week, which may be adapted for local use.

Every news article connected with baby week, whether it is about the work of a committee or an event of the week, may give an opportunity for saying something that adds to the educational work of baby welfare.

For examples of newspaper articles on baby week, see page 56; also, Appendix, page 136.

On pages 55 to 64 will be found descriptions of publicity methods which have proved useful.

Cooperation of merchants and other business men.

The committee should bear constantly in mind that the primary purpose of baby week is an educational campaign and all cooperation offered should be tested by this standard. In every community there are public-spirited merchants who will cooperate with the committee and will contribute window space or articles for exhibits which the committee approves, and who will assist in the distribution of posters and educational material supplied by the committee.

It is of the utmost importance that any printed matter or exhibit material used by merchants under the committee's sanction should be approved by the committee.

If possible the committee should try to arrange with merchants in advance for suitable window exhibits.

Every effort should be made to discourage meetings or baby examinations which are not under the supervision of the baby-week committee upon which are represented the medical society, the department of health, and the women's organizations.

FOLLOW-UP WORK.

Just as important as the campaign of baby week is the follow-up campaign which should succeed it. One of the two main objects of a baby week as sketched in the preceding sections is to bring before the public a realization of the facts relating to baby welfare in the community and the need of greater efforts on the part of the community to protect its babies. If this has been successful, at the end of the baby week the time will be ripe for the urging of specific programs for the welfare of babies. As suggested before, some communities may find it wise to concentrate during baby week on one particular phase of work; here an especially good opportunity will be given for follow-up work after the celebration.

In the section on organizing baby week the statement was made that, before dissolving, the executive committee of the baby-week campaign should appoint a committee to make plans for follow-up work. The local department of health should be represented on this committee.

In communities where the city health departments are already carrying on good medical and nursing work for mothers and babies, where the milk supply is properly safeguarded, where birth registration is prompt and complete, the follow-up campaign will naturally be directed toward giving these public activities continued intelligent support and will emphasize the need of studying the city's responsibility for bettering sanitation, housing, and industrial conditions.

In communities where private organizations are carrying on infant-welfare work, but where little money is allowed the city departments for this purpose, a follow-up publicity campaign may help in obtaining the popular support which will enable these departments to take up such work. The follow-up campaign here will also help private organizations. The stimulation of better cooperation among all agencies interested in infant welfare should be one of the important results of baby week.

Many communities have as yet no work, public or private, for the welfare of babies; here the follow-up campaign will be directed toward beginning some work of this kind according to local needs.

Public-health or visiting nurses.

Recent years have proved that an indispensable part of any work for the welfare of babies, as well as of all public-health work, is public-health nursing. This service is needed in country and city alike.

Public-health nursing differs from private nursing in that it is concerned with the health of all the people of the community rather than with that of one individual. The public-health nurse is at the service of every member of the community. Those desiring her services in their homes who can pay for her visits do so, but those unable to pay may call upon her without charge. Her function is to concern herself with all the conditions in the community which may have a bearing on the health of its citizens. She is a public servant rather than a private luxury. By instruction, by demonstration, by inspection, and by the giving of nursing care she will try to increase the common knowledge of the prevention of disease and the maintenance of health on the one hand and will teach the community to recognize the early signs of disease and will explain the methods of checking its progress and restoring health on the other. One of her primary duties is to work for the saving of infant lives. By her advice to mothers during the period of pregnancy and her guidance through the first critical years of the baby's life she can supplement the doctor's services in keeping the baby sturdy and free from illness. In addition to instruction, many public-health nurses give nursing care during the lying-in period and in the event of any illness of the baby or other member of the family.

In the school the public-health nurse finds an excellent opportunity to discover any physical defects that may be developing in the school child. By early discovery and prompt eradication the results of such defects may be made almost negligible. She looks for symptoms of eye strain, of adenoids and enlarged tonsils, of poor teeth, of malnutrition, of nervous disease, of heart disease, or of contagious disease.

Another important duty of the public-health nurse is to discover tuberculosis in its early stages, to assist the patient to secure immediate treatment looking toward the arrest of the disease, and to teach him how to protect his family and associates from infection.

By formation of health leagues, little mothers' classes, mothers' clubs, girl scout classes in hygiene and home nursing, or other similar clubs and classes, the nurse seeks to carry the knowledge of the laws of health into the homes.

During baby week publicity may be given through talks, newspaper articles, exhibits, etc., to the need for public-health nursing in the community.

The cost of employing a public-health nurse depends somewhat on local conditions. The salary of a nurse qualified to do this work varies between \$75 and \$125 a month. In addition allowance must be made for transportation, telephone, and incidental expenses.

The cost of a nursing service is in some cases met by private subscription, in others by public funds, in others by a combination of the two. Many boards of education and health departments, city or county, now employ nurses; and there is a constant tendency for them to take over the work of private organizations. In several States laws have recently been passed allowing county boards of supervisors to appropriate money for the employment of nurses. A pamphlet on public-health nursing makes the following statement: "Every community has resources which become more accessible when once it is convinced of the value of the nurse's work. For this reason it is advised that if six months' salary is available the work should be put under way. This is the best method of educating a community to the need and usefulness of a visiting nurse."¹

The National Organization for Public-Health Nursing, 600 Lexington Avenue, New York City, stands ready to help any local organization that desires its assistance. For instance, it will furnish copies of a suggested constitution and by-laws, together with rules and regulations for the nursing service, also a monograph describing the organization and administration of a visiting-nurse service. It will give advice on methods of organization and of raising funds; it will assist in securing suitable nurses; it will send its executive secretary for consultation or public speaking; and it will render any other assistance, except that it will not undertake actual supervision or administrative responsibility.

Associations in small towns and in rural districts may obtain special help from the Town and Country Nursing Service of the American Red Cross, Washington, D. C. Committees associating their work with the Red Cross through affiliation will receive assistance

¹American Red Cross Town and Country Nursing Service. General Outline, 1914, p. 16.

in organizing and in securing nurses especially qualified for work in such communities. The Red Cross will supply upon request a general outline including suggestions for organization and administration.

The Public-Health Nurse Quarterly, published by the National Organization for Public-Health Nursing, 612 St. Clair Avenue, Cleveland, Ohio, gives information with regard to the problems and activities of public-health nursing. It amounts to a current textbook on the activities of public-health nursing.

Infant-welfare stations.

Infant-welfare stations have proved their value. The Children's Bureau¹ has information regarding 539 stations maintained, at least during the summer months in 1915, in 142 cities in the United States which had a population of 10,000 and over in 1910. In 60 of these cities infant-welfare stations were carried on by the health department or by the health department in cooperation with private organizations, and in the remainder by private organizations. There is a growing tendency for health departments to take over the work.

To infant-welfare stations mothers bring their babies once a week. A physician sees the baby, advises the mother about the feeding, and urges her to nurse the baby if possible. Through such help many mothers are able to nurse their babies who otherwise would wean them. If nursing is impossible, the doctor advises the mother how the bottle feeding shall be prepared. The doctor and the nurse tell her of the methods by which she can keep her baby well throughout the hot summer weather. The nurse then visits the mother in her home and shows her how to carry out the doctor's instructions.

Very often pure milk is sold at these stations. Experience has proved, however, that this is not necessary for the success of the work.

Prenatal care, or the care and instruction of women before confinement, in many cases is carried on through the stations. This work has lately increased rapidly. The Children's Bureau has records at present of prenatal work being carried on in 188 different localities.

The Public Health Commission of New York State in 1913 recommended that "each city with a population in excess of 10,000 and having an industrial population should have one infant-welfare station, and larger cities with an industrial population should have one such station for approximately each 20,000 inhabitants."

In smaller communities and in rural districts an infant-welfare station of the type successful in cities may not be practical. Here a "center for infant and maternal welfare" may, however, be feasible.

¹ See U. S. Children's Bureau. Tabular Statement of Infant-Welfare Work by Public and Private Agencies in the United States. Bureau publication No. 15.

This may be established at a county seat, possibly in the courthouse; here the local or county nurse may have her headquarters; there may be a rest room for mothers and babies, scales for weighing the baby, objects for use in demonstrations by the nurse, a small exhibit on baby and maternal welfare, and literature for distribution on the care of mother and baby. Here the nurse can be consulted by mothers from the surrounding country; the baby can be weighed, and advice on the care of mother and baby given. Here baby-health conferences can be held by physicians at regular intervals.

Information with regard to the equipment and establishment of infant-welfare stations will be given by the Children's Bureau on request.

Instruction of young girls in infant hygiene.

In some cities instruction in infant hygiene is given as a regular part of the school work, in others it frequently takes the form of Little Mothers' Leagues, which are self-governing organizations of the girls of the higher grades in the schools. The girls are given lectures and demonstrations by physicians, nurses, or teachers. On joining they receive a certificate and often a badge or button. In at least 97 cities some instruction of this kind is reported. Further information with regard to this work among schoolgirls may be obtained from the Children's Bureau, from the divisions of child hygiene of the New York City and the New York and Kansas State Departments of Health, and from the Child Federation, Witherspoon Building, Philadelphia.

Birth registration.

If the question of birth registration has not been given any special emphasis in the preliminary work or in the actual campaign, the suggestions made on page 77 may be of assistance in forming plans for follow-up work. To secure permanent results the committee should consult with State and local registration authorities; should ascertain by inquiry of these officers or by correspondence with the United States Census Bureau, Washington, D. C., or with the Children's Bureau whether the State registration law needs amending or whether a new law is needed; and should make some investigation to ascertain whether the law is adequately administered. Suggestions concerning types of investigation may be obtained by addressing the Children's Bureau.

If the question of birth registration has been emphasized in the campaign, the follow-up work may consist chiefly in devising methods to keep the subject fresh in the minds of the parents in the community. The State and local registration authorities may be consulted as to the best method of doing this.

It is desirable that parents should receive a notification from the State or local registration authorities when their child's birth has been registered, and as much publicity as possible should be given to this idea. (See p. 42.)

Divisions or bureaus of child hygiene.

A few States—Kansas, New Jersey, New York, and Ohio—have distinct divisions of their State departments of health carrying on work for infant and child hygiene. A State baby-week campaign may so crystallize public sentiment that the establishment of such a division in the State health department may result.

Twenty cities reported in 1915 the existence in the city health department of a bureau or division of child hygiene.¹ Baby week may give the needed opportunity to work for the organization of such a bureau or division in other cities. The health departments in smaller cities and rural counties receive inadequate appropriations as a rule. Public sentiment may be aroused through baby week to increase such appropriations and to establish health protection on a firm basis.

Improvement of community conditions.

Each community before or after baby week may study the community conditions affecting its babies (see p. 44), such as the local milk supply, the sewerage system, the support given the health department, methods of garbage disposal, housing regulations, and enforcement, and may use the interest aroused by baby week to bring about an improvement.

STUDY CLUBS.

Women's organizations may arrange a series of programs covering community conditions as they affect children. Suggestions for a series of studies by women's organizations will be sent on request to the Children's Bureau. Clubs may be organized for the study of the care of the baby, the mother, and the child.

The excellent educational literature now easily procurable on these subjects may be studied.

The various follow-up programs developed by 1916 campaigns (see p. 64) illustrate many other different lines of work for the welfare of the baby which may be followed after baby week.

The Children's Bureau has in preparation a bulletin giving in more detail suggestions for follow-up work. This bulletin may be obtained free on application as soon as it is available.

¹ See U. S. Children's Bureau. *Tabular Statement of Infant-Welfare Work by Public and Private Agencies in the United States.* Bureau publication No. 16, p. 21.

PLEASE REPORT ON YOUR BABY WEEK.

The Children's Bureau is very anxious to obtain information with regard to the baby-week campaigns carried on throughout the country. It therefore requests each baby-week committee at the close of a campaign to send to the bureau as complete an account as possible of the campaign. In drawing up the account the following outline may be useful:

1. Name of city.
2. Organizations cooperating in the campaign.
3. Number of people on all the committees.
4. Outline of week's program.
5. Total expense.
6. Newspaper publicity.
7. Was a baby-health conference held? Number of babies examined?
8. Was an infant-welfare exhibit held? Rented? Borrowed? Constructed?
9. Number of meetings and talks.
10. Were plays used? Titles? Number of times given? Plays written locally?
11. Did you have any new and unusual features that were successful?
12. Follow-up work planned.
13. Did you have a campaign before, and what changes did you find it wise to make in this campaign?

In addition the bureau will be glad to receive copies of all printed matter and press material used during the campaign. On request the bureau will send a franked envelope, which may be used in forwarding the material.

APPENDIX.

COMMUNITIES IN WHICH A BABY-WEEK CAMPAIGN WAS HELD IN 1916.

[The total number of places shown in this list for Kansas, Kentucky, Louisiana, Mississippi, Nebraska, Tennessee, Texas, and Wyoming does not agree with the totals for these States shown on page 11. In each of these States the official report from State authorities gave a definite number of local campaigns but did not name all the communities. Names of all communities follow the form given in the United States Official Postal Guide.]

Alabama :	Arkansas—Con.	California—Con.	Colorado—Con.
Anniston.	Arkansas City.	Davis.	Grover.
Attalla.	Ashdown.	Dunlap (Indian mission).	Holly.
Bessemer.	Angusta.	El Centro.	Hotchkiss.
Birmingham, including suburbs.	Bentonville.	Elsinore.	Kelly and Leroy.
Brewton.	Blytheville.	Escondido.	La Junta.
Centerville and Bibb County.	Brinkley.	Grass Valley and Nevada City.	Longmont and Boulder County.
Clanton.	Camden.	Hardwick.	Meeker.
Columbia.	Conway.	Inglewood.	Connecticut :
Columbiana.	Crawfordville.	Long Beach.	Ansonia.
Cottage Grove.	El Dorado.	Los Angeles and county.	Bridgeport.
Decatur.	Fayetteville.	Los Gatos.	Danbury.
Demopolis.	Forrest City.	Moorpark (Santa Rosa Valley).	Derby.
Dothan.	Fort Smith.	National City.	Hartford.
Eufaula.	Graysonia.	Oakland and Alameda County.	Middletown and near-by places.
Fairfield.	Helena.	Orosi.	Stanford.
Gadsden.	Hope.	Petaluma.	Stratford.
Huntsville and West Huntsville.	Hot Springs.	Redlands.	Waterbury.
Jasper.	Jonesboro.	Richmond.	Wethersfield.
Marvel.	Lamar.	Riverside.	Willmantic.
Mobile.	Little Rock.	Roseville.	Delaware :
Montevallo.	Magnolia.	Sacramento.	Bridgeville.
Montgomery.	Malvern.	Salinas.	New Castle.
Ozark.	Marvell.	San Bernardino.	Seaford.
Prattville.	Mena.	San Diego, including suburbs.	Wyoming.
Selma.	Mount Ida.	San Fernando.	District of Columbia :
Tallassee.	Murfreesboro.	San Francisco.	Washington.
Troy.	Nashville.	Stockton.	Florida :
Tuscaloosa.	Osceola.	Weaverville.	Auburndale.
Tuskegee.	Paragould.	Woodland.	Avon Park.
Union Springs.	Pine Bluff.	Colorado :	Eau Gallie and Melbourne.
Arizona :	Prescott.	Barnesville.	Fort Myers.
Flagstaff.	Rector.	Delta.	High Springs.
Phoenix.	Rogers.	Denver.	Inverness.
Somerton (Yuma Valley).	Searcy.	Grand Junction.	Jacksonville.
Willcox.	Shirley.	Greeley.	Jasper.
Williams.	Siloam Springs.		Miami.
Arkansas :	Stamps.		New Smyrna.
Altheimer.	Stuttgart.		Ocala.
Arkadelphia.	Texarkana.		Orlando.
	Van Buren.		Ozona.
	Winslow.		Panama City.
	California :		
	Alta Loma.		
	Auburn.		
	Chino.		
	Corona.		

Florida—Contd.	Idaho—Contd.	Illinois—Contd.	Iowa—Contd.
Pensacola.	Harrison.	Ottawa.	Alta.
Sanford.	Lewiston.	Paxton.	Ames.
Tarpon Springs.	Moscow.	Peoria.	Anita.
Winterhaven.	Payette.	Petersburg.	Anthon.
Georgia :	Post Falls.	Pleasant Plains.	Cedar Rapids.
Albany.	Preston.	Rio.	Centerville.
Athens.	Rigby.	Rochelle.	Charles City
Atlanta.	Springfield.	Rock Island.	and Floyd
Augusta.	Weiser.	Rockford.	County or-
Bainbridge.	Illinois :	Sandwich.	ganizations.
Barnesville.	Abingdon.	Sparta.	Clearfield.
Blackshear.	Aurora.	Springfield.	Clinton.
Blakely.	Belleville.	Spring Valley	Council Bluffs.
Brunswick.	Belvidere.	and Hall	Davenport.
Calhoun.	Benton.	Township.	Denison.
Camilla.	Bloomington	Stonington.	Des Moines.
Cartersville.	and McLean	Taylorville.	Dewitt.
Collegepark.	County or-	Tuscola.	Dows.
Columbus.	ganizations.	Urbana.	Dubuque.
Commerce.	Byron.	Waukegan.	Dunlap.
Covington.	Cairo.	Wheaton.	Eldora.
Cuthbert.	Carbondale.	Winnetka.	Elkader.
Dawson.	Cartersville.	Zion.	Emmetsburg.
Decatur.	Champaign.	Indiana :	Epworth.
Dublin.	Charleston.	Anderson.	Fonda.
Eastman.	Chicago.	Aurora.	Fort Dodge.
Fort Valley.	Chicago H'ts.	Brookville.	Garner.
Gray.	Danville.	Butler.	Glenwood.
Griffin.	Decatur.	Columbia City.	Glidden.
Haddock.	De Kalb.	Columbus.	Goldfield.
Lagrange.	Dwight.	Elkhart.	Grand Junction.
Lithonia.	Elgin.	Evansville.	Greenfield.
Macon.	Elmwood.	Frankfort.	Grinnell.
Madison.	Evanston.	Greenfield.	Grundy Center.
Manchester.	Fairbury.	Holland and	Guthrie Center.
Marietta.	Farmer City.	Dubois Coun-	Harlan.
Milledgeville.	Forest Park.	ty organiza-	Idagrove.
Monroe.	Galena.	tions.	Iowa City.
Montezuma.	Galesburg.	Indianapolis.	Iowa Falls.
Mount Berry.	Gibson City.	Kentland.	Jefferson.
Newnan.	Harvey.	Kokomo.	Keokuk.
Perry.	Highland Park.	La Fayette.	Laporte City.
Porterdale.	Hinsdale.	Lagrange.	Laurens.
Quitman.	Jacksonville.	Laporte.	Le Mars.
Reidsville.	Joliet.	Marion (N.).	Marshalltown.
Rock Mart.	Jonesboro.	Michigan City.	Mediapolis.
Rome.	Kankakee and	Mishawaka.	Mount Pleasant
Savannah.	county organ-	Morgantown.	and Henry
Social Circle.	izations.	Mount Vernon.	County organ-
Thomasville.	Kewanee.	Plymouth.	izations.
Thomson.	La Salle.	Roachdale.	Mount Vernon.
Tifton.	Lake Forest.	Rochester.	Muscatine.
Vadosta.	Lincoln.	Rolling Prairie.	Mystic.
Vidalia.	Lockport.	Sullivan.	New Sharon.
Vienna.	Marion.	Terre Haute.	Odebolt.
Waycross.	Mattoon.	Tipton.	Oelwein.
Waynesboro.	Melvin.	Valparaiso.	Osage.
West Point.	Mendota.	Vincennes.	Oskaloosa.
Hawaii :	Morris.	Wabash.	Oto.
Palama Settle-	Mound City.	Whiting.	Ottumwa.
ment, Hono-	Mount Carmel.	Winamac.	Pella.
lulu.	Mount Carroll.	Winona Lake.	Perry.
Idaho :	Mount Vernon.	Iowa :	Ralston.
American Falls.	Murphysboro.	Akron.	Redfield.
Coeur d'Alene.	Olney.	Allison.	Red Oak.
Filer.			

Iowa—Contd.

Rock Rapids.
Sheffield.
Sheldon.
Shenandoah.
Sioux City.
Storm Lake.
Sutherland.
Toledo.
Traer.
Union.
Vinton.
Waterloo.
Webster City.
West Union.

Kansas :

Abilene.
Alta Vista.
Altoona.
Americus.
Arkansas City.
Arlington.
Atchison.
Attica.
Auburn.
Baldwin City.
Basehor.
Belleville.
Beloit.
Belpre.
Bern.
Birmingham.
Bloom.
Blue Rapids.
Bonner Springs.
Burden.
Burdett.
Burlingame.
Burlington.
Burr Oak.
Burton.
Caldwell.
Carbondale.
Cawker City.
Cedar Vale.
Chanute.
Chapman.
Chase.
Cheney.
Cherokee.
Chetopa.
Cimarron.
Clay Center.
Clearwater.
Clifton.
Clyde.
Coffeyville.
Colby.
Coldwater.
Colony.
Council Grove.
Cullison.
Cummings.
Cunningham.
Dearing.
Deerfield.
Denton.

Kansas—Contd.

Douglass.
Effingham.
Ellis.
Ellsworth.
Emporia.
Enterprise.
Eureka.
Florence.
Ford.
Fort Scott.
Fowler.
Fredonia.
Friend.
Galena.
Gaylord.
Girard.
Glen Elder.
Goddard.
Goodland.
Great Bend.
Greenleaf.
Grenola.
Hardtner.
Havensville.
Hays.
Herington.
Hesston.
Hiawatha.
Highland.
Hope.
Horton.
Howard.
Hutchinson.
Independence.
Iola.
Jennings.
Junction City.
Kanopolis.
Kansas City.
Kincald.
Kingman.
Kinsley.
Klapp.
La Crosse.
La Harpe.
Lansing.
Larned.
Lawrence.
Leavenworth.
Lebanon.
Liberal.
Lincoln.
Lindsborg.
Longford.
Longton.
Louisburg.
Lovewell.
Lyons.
McPherson.
Manhattan.
Mankato.
Maplehill.
Marion.
Meade.
Meriden.
Miltonvale.

Kansas—Contd.

Moline.
Mont Ida.
Montezuma.
Morrill.
Mulberry.
Natoma.
Neodesha.
Neosho Falls.
Newton.
Nickerson.
Olathe.
Onaga.
Osage City.
Oswego.
Ottawa.
Overbrook.
Oxford.
Ozawkie.
Parsons.
Pittsburg.
Plains.
Plainville.
Pleasanton.
Potwin.
Powhattan.
Pratt.
Pretty Prairie.
Protection.
Quinter.
Randolph.
Raymond.
Republic.
Riley.
Rock.
Russell.
St. Francis.
St. John.
Salina.
Scandia.
Sedgwick.
Seneca.
Severy.
Sharon.
Smith Center.
Solomon.
South Haven.
Stafford.
Sterling.
Strong.
Summerfield.
Sylvan Grove.
Sylvia.
Tonganoxie.
Topeka.
Toronto.
Tribune.
Utopia.
Valley Falls.
Viola.
Walton.
Washington.
Wayne.
Webber.
Webster.
Wellington.
Wetmore.

Kansas—Contd.

White City.
Wichita.
Wilder.
Yates Center.
Zeandale.
Kentucky :
Bardstown.
Berea.
Franklin.
Harrodsburg.
Henderson.
Lawrenceburg.
Louisville.
Murray.
Paducah.
Somerset.
Louisiana :
Alexandria.
Baton Rouge.
Bunkie.
Campti.
Crowley.
Homer.
La Fayette.
Lake Charles.
Leesville.
Monroe.
Morgan City.
New Orleans.
Rayville.
Shreveport.
Simsboro.
Tallulah.
Maine :
Augusta.
Bar Harbor.
Biddeford.
Fairfield.
Guilford.
Hinkley.
Lewiston and
Auburn.
Oakland.
Portland.
Saco.
Sanford.
Springvale.
Wayne.
Westbrook.
York (p. o.
York Har-
bor).
Maryland :
Annapolis.
Baltimore.
Cambridge and
Dorchester
County or-
ganizations.
Cumberland.
Frederick.
Kensington.
Massachusetts :
Abington and
North Abing-
ton.

Massachusetts— Continued.	Michigan—Con- tinued.	Mississippi :	Missouri—Contd.
Arlington.	Coloma.	Batesville.	Mount Vernon.
Arlington Heights.	Crystal Falls.	Como.	Mountain Grove.
Athol.	Detroit.	Goodman.	Nevada.
Beverly.	Escanaba.	Greenwood.	Newburg.
Billerica.	Gladstone.	Gulfport.	Otterville.
Blackstone.	Grand Haven.	Hazlehurst.	Palmyra.
Boston.	Grand Rapids.	Magnolia.	Paris.
Braintree.	Grosse Pointe	Meridian.	Perry.
Brockton.	Farms (p. o.	Natchez.	Piedmont.
Cambridge.	Grosse Pointe).	Sardis.	Pierce City.
Clinton.	Hancock.	West Point.	Polo.
Concord.	Hart.	Missouri :	Pomona.
Dedham (East	Hastings.	Albany.	Poplar Bluff.
Dedham).	Houghton.	Appleton City.	Richland.
East Bridge-	Iron Mountain.	Aurora.	Rolla.
water.	Jackson.	Bethany.	St. James.
Fall River.	Kalamazoo.	Bonne Terre.	St. Joseph and
Franklin.	Lansing.	Bowling Green.	Avenue City.
Gardner.	Lawrence.	Braymer.	St. Louis.
Holyoke.	Lowell.	Brookfield.	Salem.
Hudson.	McBain.	California.	Salisbury.
Hyde Park.	Mackinaw.	Cameron.	Savannah.
Lawrence.	Marshall.	Cape Girardeau.	Sedalia.
Littleton Com-	Mendon.	Carrollton.	Sikeston.
mon.	Menominee.	Carthage.	Springfield.
Lowell.	Muskegon.	Caruthersville.	Tarkio.
Mansfield.	Owosso.	Cassville.	Trenton.
Marlboro.	Pentwater.	Centralia.	Vandalia.
Newton.	Portland.	Charleston.	Watson.
North Adams.	Redford.	Chillicothe.	Westplains.
North Reading.	Saginaw.	Clarksville.	Montana :
Northampton	St. Joseph.	Clayton.	Anaconda.
(Hampshire	Three Rivers.	Columbia.	Basin.
County con-	Ypsilanti.	Cuba.	Belgrade.
ference).	Minnesota :	Elsberry.	Bigtimber.
Northboro.	Akely.	Eolia.	Columbus.
Pittsfield.	Albert Lea.	Farmington.	Deer Lodge.
Plymouth.	Anoka.	Flat River.	Fromberg.
Rockland.	Austin.	Glasgow.	Glendive.
Salem.	Blue Earth.	Graham.	Great Falls.
Somerville.	Brainerd.	Greenfield.	Hedgesville.
Southbridge.	Champlin.	Hamilton.	Kalspell.
Springfield.	Duluth.	Hannibal.	Laurel.
Taunton.	Fairmont.	Hardin.	Lewistown.
Templeton.	Faribault.	Harrisonville.	Livingston.
Walpole.	Funkley.	Houstonia.	Missoula.
West Acton.	Kenyon.	Huntsville.	Red Lodge.
Westfield.	Mankato.	Ironton.	Union.
Whitman.	Marshall.	Jamesport.	Nebraska :
Winthrop.	Minneapolis.	Jefferson City.	Ainsworth.
Woburn.	Moorhead.	Joplin.	Alliance.
Worcester.	Moose Lake and	Kansas City.	Alvo.
Michigan :	Willow River.	Kirksville.	Arnold.
Adrian.	Nevis.	Knox City.	Ashland.
Albion.	Nicollet.	Lebanon.	Atkinson.
Allegan.	Owatonna.	Lexington.	Auburn.
Alpena.	Redlake (Indian	Lock Spring.	Aurora.
Battle Creek.	agency).	Lockwood.	Avoca.
Calumet and	Robbinsdale.	Louisiana.	Axtell.
Laurium.	St. Paul.	Marceline.	Bassett.
Carson City.	St. Peter.	Marionville.	Benson.
Cassopolis.	Stewartville.	Maryville.	Bigspring.
Charlotte.	Tracy.	Maysville.	Blue Springs.
Clinton.		Mexico.	Bradshaw.
		Moberly.	Bridgeport.
		Monroe City.	Broken Bow.

Nebraska—Con.	Nebraska—Con.	New Jersey—Con.	New York—Con.
Cambridge.	St. Paul.	Burlington.	Dobbs Ferry.
Chadron.	Salem.	Chatham.	East Otto and
Clarks.	Santee.	Dover.	East Otto
Coleridge.	Scottsbluff.	East Orange. ¹	Town.
Colyer.	Seward.	Elizabeth.	Elmira.
Cozad.	South Auburn.	Englewood.	Endicott.
Crab Orchard.	Spalding.	Freehold.	Glen Cove.
Creighton.	Spencer.	Haddon Heights	Glens Falls.
Crofton.	Springfield.	Haddonfield.	Gloversville.
Culbertson.	Stella.	Hoboken.	Herkimer.
Curtis.	Sterling.	Hopewell.	Highland Falls.
De Witt.	Stromsburg.	Jersey City.	Homer.
Edgar.	Sutherland.	Kearney (p. o.	Hudson.
Eustis.	Sutton.	Arlington).	Ilion.
Exeter.	Syracuse.	Keyport.	Ithaca.
Fairbury.	Tecumseh.	Little Falls.	Jamestown.
Fairfield.	Tobias.	Madison.	Jordan.
Falls City.	Ulysses.	Matawan.	Kingston.
Fremont.	Valentine.	Millville.	Le Roy.
Fullerton.	Valley.	Moorestown.	Lowville.
Geneva.	Valparaiso.	Newark.	Malone.
Gering.	Wahoo.	Orange. ¹	Middletown.
Gothenburg.	Walthill.	Passaic.	Montrose.
Greenwood.	Wayne.	Paterson.	New Rochelle.
Gresham.	Westpoint.	Plainfield and	New York.
Guide Rock.	Whitney.	North Plain-	Newark.
Hartington.	Winnebago.	field.	Newburgh.
Hayes Center.	Wisner.	Pompton Lakes.	Niagara Falls.
Holdrege.	Wymore.	Pompton Plains.	Norwich.
Hooper.	York.	Red Bank.	Nyack.
Humboldt.	Nevada :	Ridgefield Park.	Olean.
Humphrey.	Elko.	Roselle.	Oneonta.
Inavale.	Fernley.	Roselle Park	Ossining.
Johnson.	Goldfield.	(p. o. Eliza-	Perry.
Kearney.	Las Vegas.	beth).	Philadelphia.
Laurel.	Manhattan.	Salem.	Plattsburg.
Lexington.	Nixon (Indian	South Orange. ¹	Pulaski.
Liberty.	Agency).	Trenton.	Rochester.
Lincoln.	Winnemucca.	Vineland.	Saranac Lake.
Loup City.	Yerington.	West Hoboken.	Saugerties.
Lyons.	New Hampshire :	West Orange. ¹	Schenectady.
McCook.	Berlin.	New Mexico :	Sherburne.
McCool Junc-	Cascade.	Albuquerque.	Sidney.
tion.	Concord.	Artesia.	Springville.
Madison.	Derry.	Carlsbad.	Syracuse.
Mason City.	Durham.	Gallup.	Tonawanda.
Morrill.	Franklin.	Las Cruces.	Troy.
Nelson.	Gorham.	Las Vegas.	Tupper Lake.
Norfolk.	Keene.	Mesilla Park.	Utica.
North Bend.	Laconia.	Raton.	Victor.
North Loup.	Littleton.	Santa Fe.	Watertown.
North Platte.	Manchester.	Silver City.	West Coxsackie.
Oakdale.	New Market.	New York :	Westchester
Oakland.	Peterboro.	Albany.	County
Omaha.	Portsmouth.	Amsterdam.	(northern).
Ord.	Rochester.	Auburn.	Yonkers.
Osceola.	Warren.	Batavia.	North Carolina :
Overton.	Windham Depot	Binghamton.	Albamarle.
Palmyra.	New Jersey :	Buffalo.	Ashboro.
Pawnee City.	Asbury Park.	Canajoharie.	Chapel Hill.
Pierce.	Atlantic City.	Carthage.	Charlotte.
Plattsmouth.	Bayonne.	Cattaraugus.	Cherokee (In-
Ponca.	Bloomfield.	Clayton.	dian school).
Rising City.	Boonton.	Cortland.	Cliffside.
Rosalie.	Bridgeton.	Delhi.	Franklin.

¹ Cooperation among the Oranges in celebrating campaign.

North Carolina—
Continued.

Goldsboro.
Greenville.
Oxford.
Randleman.
Salisbury.
Spray.
Vineland.
Waynesville.

North Dakota:

Alexander.
Ambrose.
Aneta.
Ashley.
Bathgate.
Beach.
Bismarck.
Bottineau.
Bowman.
Cando.
Carrington.
Carson.
Casselton.
Cavaller.
Cogswell.
Columbus.
Crosby and Fill-
more Township.
Crystal.
Devils Lake.
Ellendale.
Fargo.
Fessenden.
Flaxton.
Getchell Prai-
rie (p. o. Val-
ley City).
Grand Forks.
Hankinson and
Greendale
Township.
Jamestown.
Juanita.
Jud.
Kenmare.
Lakota.
La Moure.
Langdon.
Larimore.
Leal.
Leeds.
Leith.
Lidgerwood.
Lignite.
Lisbon.
Marion.
Mayville.
Minot.
New Rockford.
Niagara.
Oakes.
Oriska.
Pembina.
Pettibone.
Rugby.
St. Thomas.

North Dakota—
Continued.

Temvik.
Turtle Lake.
Valley City.
Velva.
Wahpeton.
Walhalla.
Westhope.
Williston.
Wimbledon.

County schools
throughout
State gen-
erally partici-
pated.

Ohio:

Akron.
Alliance.
Amherst.
Ashland.
Ashtabula.
Athens.
Baltimore.
Batavia.
Berlin Heights.
Bethel.
Bowling Green.
Burton.
Cadiz.
Cincinnati.
Cleveland.
Columbus.
Conneaut.
Continental.
Coshocton.
Crestline.
Dayton.
Delta.
East Liverpool.
Fostoria.
Fremont.
Gallion.
Garrettsville.
Greenfield.
Greenville.
Harrison.
Jackson.
Jefferson.
Kenton.
Lima.
Lorain.
Marietta.
Marion.
Mechanicsburg.
New Straitsville.
Newark.
North Kings-
ville.
Norwood.
Oxford.
Ravenna.
Ripley.
St. Paris.
Salem.
Sandusky.

Ohio—Continued.

Shelby.
Spencerville.
Springfield.
Tiffin.
Toledo.
Upper San-
dusky.
Waldo.
Warren.
Washington
Courthouse.
Wauseon.
West Milton.
Worthington.
Xenia.
Yellow Springs.
Youngstown.
Zanesville.

Oklahoma:

Bartlesville.
Collinsville.
Drumright.
Edmond.
Elk City.
Fairfax.
Haileyville.
Marlow.
Muskogee.
Nowata.
Pawhuska.
Stigler.
Wagoner.
Wewoka.
Woodward.

Oregon:

Ashland.
Corvallis.
Joseph.
Klamath Falls.
La Grande.
Medford.
Oregon City.
Pendleton.

Pennsylvania:

Allentown.
Ardmore.
Bethel.
Bryn Mawr.
Butler.
Carlisle.
Carrick (p. o.
Pittsburgh).
Chester.
Clarion.
Clifton Heights
and Aldan.
Coatesville.
Collingdale (p.
o. Darby).
Columbia.
Concord.
Connellsville.
Coudersport.
Cynwyd and
Pencoyd.
Darby.

Pennsylvania—
Continued.

Doylestown.
Drexel Hill.
Dubois.
East Downing-
town.
East Lans-
downe (p. o.
Lansdowne).
Easton.
Erie.
Everett.
Fredonia.
Galeton.
Garrettsford (p.
o. Drexel
Hill).
Greensburg.
Harrisburg.
Huntingdon.
Jenkintown.
Johnstown.
Kane.
Langhorne.
Lebanon.
Lincoln Uni-
versity.
Linwood Sta-
tion (p. o.
Marcus
Hook).
Mahanoy City.
Meadville.
Media.
Mercer.
Morton.
Narberth.
New Brighton.
New Castle.
New Kensington.
Norristown.
Norwood Sta-
tion.
Oakmont.
Palmerton.
Philadelphia.
Pittsburgh.
Plymouth.
Pottsville.
Quarryville.
Reading.
Ridley Park.
Rutledge.
Sandy Lake.
Sharon Hill.
Somerset.
South Bethle-
hem.
Stroudsburg.
Sunbury.
Swarthmore.
Tidioute.
Titusville.
Towanda.

Pennsylvania—

Continued.
Trainer (p. o. Chester).
Troy.
Tyrone.
Upper Darby.
Warren.
Warrington.
Washington.
Wayne.
Wilkes-Barre.
Williamsport.
Windber.
York.
Rhode Island:
Apponaug.¹
Barrington.¹
Bradford.
Bristol.
Chepachet.
Conimicut.¹
Cranston (p. o. Providence).¹
East Greenwich.¹
East Providence.¹
Hope Valley.
Kingston.¹
Newport.
North Providence.¹
North Smithfield (p. o. Providence).¹
Pascoag.¹
Pawtucket.¹
Providence.
Smithfield.¹
Warren.
Washington.²
Westerly.
Woonsocket.¹
South Carolina:
Abbeville.
Aiken.
Allendale.
Anderson.
Calhoun Falls.
Camden.
Charleston.
Clinton.
Clio.
Columbia.
Darlington.
Dillon.
Edgefield.
Florence.
Greenville.
Johnston.
Lancaster.
Landrum.
McColl.

South Carolina—

Continued.
Rock Hill.
Spartanburg.
Westminster.
Williamston.
South Dakota:
Aberdeen.
Centerville.
Clark.
Deadwood.
Elk Point.
Faulkton.
Gettysburg.
Howard.
Letcher.
Madison.
Missionhill.
Parkston.
Sioux Falls and Minnehaha County.
Vermillion.
Watertown.
Yankton.
Tennessee:
Ashland City.
Chattanooga.
Clarksville.
Cleveland.
Dyersburg.
Fayetteville.
Knoxville.
Maryville.
Memphis and Shelby County.
Nashville.
Ridgetop.
Sewanee.
Tulahoma.
Union City.
Texas:
Acme.
Aspermont.
Austin.
Bartlett.
Bastrop.
Bay City.
Beaumont.
Beeville.
Belton.
Bloomington Grove.
Brenham.
Brownsville.
Brownwood.
Bryan.
Caldwell.
Calvert.
Cameron.
Carrizo Springs.
Childress.
Chireno.
Cisco.

Texas—Contd.

Claude.
Cleburne.
Coleman.
College Station.
Corpus Christi.
Corsicana.
Cuero and De Witt County organizations.
Dalhart.
Dallas.
Denton.
Eagle Lake.
Edna.
El Paso.
Farwell.
Fort Worth.
Francitas.
Frost.
Galveston.
Ganado.
Greenville.
Hamlin.
Haskell.
Hillsboro.
Honey Grove.
Houston.
Indian Gap.
Jacksonville.
Jewett.
Kingsville.
Lagrange.
Laredo.
Linden.
Lometa.
Longview.
Lubbock.
Manor.
Marshall.
Mart.
Mercedes.
Mineral Wells.
Mount Pleasant.
Mount Vernon.
Nacogdoches and county organizations.
Odessa.
Olney.
Orange.
Parnell.
Ricardo.
Rosebud.
San Angelo.
San Antonio.
San Benito.
San Juan.
San Marcos.
Sherman.
Stephenville.
Sutherland Springs.
Temple.

Texas—Contd.

Tennessee Colony.
Terrell.
Texarkana.
Texas City.
Tyler.
Uvalde.
Valera.
Vanderbilt.
Waco.
Waxahachie.
Wellington.
West.
Wharton.
Whitesboro.
Winnboro.
Yoakum.
Utah:
Brigham.
Garfield.
Garland.
Kingston.
Manti.
Ogden.
Park City.
Payson.
Provo.
Salt Lake City.
Spanish Fork.
Tooele.
Vermont:
Barre.
Bellows Falls.
Bethel.
Bradford.
Brattleboro.
Bristol.
Burlington.
Chester.
East Hardwick.
Essex Junction.
Hardwick.
Jericho.
Lyndonville.
Morrisville.
Newport.
Norwich.
Proctor.
Richford.
Rochester.
Royalton.
Rutland.
St. Albans.
St. Johnsbury.
South Royalton.
Springfield.
Swanton.
Waterbury.
White River Junction and Hartford Town.

¹This community reports a celebration in which one or more neighboring communities participated.

Vermont—Con.	Washington—Con.	Wisconsin—Con.	Wisconsin—Con.
Windsor.	Puyallup.	Boscobel.	Port Washing-
Woodstock.	Roosevelt.	Brillion.	ton.
Virginia:	Roslyn.	Burlington.	Prairie du
Clifton Forge.	Seattle.	Carrollville (p.	Chien.
Danville.	Snohomish.	o. Otjen).	Prescott.
H i g h l a n d	South Bend.	Cedarburg.	Redcliff (Indian
Springs.	Spokane.	Chippewa Falls.	reservation;
Hot Springs.	Stanwood.	Clayton.	p. o. Bay-
Lynchburg.	Summit Park	Crandon.	field).
Richmond.	(p. o. Ana-	De Pere.	Rhineland.
Washington:	cortes).	Delavan.	Rib Lake.
Aberdeen.	Summer.	Eagle.	Rice Lake.
Anacortes.	Sunnyside.	Eau Claire.	Richland Cen-
Arlington.	Tacoma.	Evansville.	ter.
Buckeye.	Toppenish.	Fennimore.	River Falls.
Burlington.	Vashon.	Fond du Lac.	Sheboygan.
Burton.	Wellpinit.	Galesville.	Sparta.
Cheney.	Wenatchee.	Grand Rapids.	Stanley.
Chewelah.	White Salmon.	Green Bay.	Stevens Point.
Dayton.	Wilbur.	Green Lake.	Stoughton.
Deer Park.	Zillah.	Hayward.	Sturgeon Bay.
Duvall.	West Virginia:	Janesville.	Superior.
Edison.	Ceredo.	Kaukauna.	Tomah.
Ellensburg.	Charleston.	Kenosha.	Tomahawk.
Garfield.	Clarksburg.	L a c d u Flam-	Two Rivers.
Goldendale.	Huntington.	beau.	Wabeno.
Grandview.	Kenova.	Ladysmith.	Washburn.
Harrington.	Macdonald.	Little Chute.	Waterloo.
Hatton.	Martinsburg.	Madison.	Waukesha.
Hogulam.	Morgantown.	Marinette.	Waupaca.
Kennewick.	Parkersburg.	Marshfield.	Waupun.
Klona and Ben-	Ravenswood.	Medford.	Wausau.
ton City.	Wellsburg.	Mellen.	Wauwatosa.
La Conner.	Weston.	Menomonie.	West Bend.
Lind.	Wheeling.	Merrill.	Whitewater.
Machias.	Wisconsin:	Middleton.	Wyoming:
Marysville.	Antigo.	Milton.	Basin.
Montesano.	Appleton.	Milwaukee.	Casper.
Mount Vernon.	Ashland.	Mineral Point.	Cheyenne.
North Yakima.	Augusta.	Monroe.	Douglas.
Olympia.	Bagley.	Morrisonville.	Graybull.
Omak.	Baraboo.	Neillsville.	Laramie.
Palouse.	Beloit.	New London.	Thermopolis.
Port Angeles.	Berlin.	Onelda.	Van Tassell.
Prosser.	Blair.	Oshkosh.	Wheatland.
Pullman.	Bloomington.	Pardeeville.	

COMMUNITIES IN WHICH A BABY-WEEK CAMPAIGN WAS HELD, 1916, CLASSIFIED ACCORDING TO POPULATION.

Total number of communities represented in the inquiries received by the bureau expressing interest in organizing a campaign and asking for instructions and literature.....	4,234
Total number of communities for which the bureau has received definite information that a campaign was held.....	2,100
Communities represented in reports received:	
Incorporated places with a population of—	
Under 2,500.....	683
2,500 to 10,000.....	488
10,000 to 25,000.....	181
25,000 to 100,000.....	129
100,000 and over.....	47
Unincorporated places.....	210
Local campaigns reported by State authorities without name or size of community.....	362

SUGGESTIONS FOR A CIRCULAR OF INFORMATION FOR USE IN THE PREPARATION OF SERMONS AND NEWSPAPER ARTICLES.

Infant mortality rate.

What is an infant mortality rate? The term "infant mortality rate" or "baby death rate" means the relation between the number of babies under 1 year of age who die in one calendar year to the number of babies born alive during that year. This is usually expressed as the number of deaths of babies which occur per 1,000 live births.

Each country, each city or town, and each rural community should know first of all what its infant death rate is, and then should do its utmost to lower this rate by all methods that have proved successful elsewhere.

What is the infant mortality rate of the United States? This can be given only for a limited part of the whole country, which is the recently established birth-registration area, representing 31 per cent of the total population of the United States. It includes the six New England States, New York, Pennsylvania, Michigan, Minnesota, and the District of Columbia. The infant mortality rate of this area in 1915 was 100 per 1,000 live births.¹ That is, of every 10 babies born alive, 1 died before it reached its first birthday. For the remainder of the country we have no reliable statistics. About one-fifth of the deaths occurring each year at all ages are of children under 1 year.

How do the infant mortality rates of other countries compare with the rate of the birth-registration area of this country?

*Deaths of infants under 1 year of age per 1,000 live births in the birth-registration area of the United States and in foreign countries.**

Country.	Infant mortality rate.	Country.	Infant mortality rate.
United States, registration area only (1915).....	100	Italy (1913).....	137
England and Wales (1913).....	108	Norway (1913).....	65
France (1912).....	78	Sweden (1912).....	71
German Empire (1912).....	147	Denmark (1913).....	94
Austria (1912).....	180	Belgium (1912).....	120
Russia in Europe (excluding Finland and the provinces of the Vistula and of the Caucasus, 1909).....	248	Holland (1913).....	91
		Switzerland (1913).....	96
		Japan (1911).....	157
		Australia (1913).....	72

* Figures furnished by the U. S. Bureau of the Census.

"The same conditions which cause the death of 13 out of every 100 babies born throughout the civilized world, on the broadest of averages, leave more or less permanent stamps on perhaps two or three times as many more babies who somehow manage to crawl over the infant dead line, many of whom will be the fathers and mothers of the next generation. The problem of infant mortality, therefore, is far more than one as to means of decreasing the number

¹ Figures furnished by the U. S. Bureau of the Census.

of infant deaths. Its scope is world-wide, and on its partial solution, at least, depends the welfare of posterity. The call for action on such a problem may fairly be termed urgent."—E. B. Phelps.

"It was formerly believed that the rate of mortality among children who had not reached the first anniversary of their birth was a wise dispensation of nature, intended to prevent children with a weak constitution becoming too plentiful. To-day we know that a great infant mortality is a national disaster—on the one hand, because numerous economic values are created without purpose and prematurely destroyed, and, on the other, because the causes of the high rate of infant mortality affect the powers of resistance of the other infants and weaken the strength of the Nation in its next generation."—Prof. Dietrich.

Causes of a high infant mortality rate.

"The fundamental causes of infantile mortality are mainly the result of three conditions—poverty, ignorance, and neglect."—Dr. L. Emmett Holt.

A study of the relation of social and economic conditions to infant mortality is now being made by the United States Children's Bureau. Reports of the findings of this inquiry in a steel-manufacturing town and in a residential suburb have already been published and show a coincidence of underpaid fathers, overworked and ignorant mothers, and those hazards to the life of the offspring which individual parents can not avoid or control because they must be remedied by community action. The introduction to one of these reports says: "All this points toward the imperative need of ascertaining a standard of life for the American family, a standard which must rest upon such betterment of conditions of work and pay as will permit parents to safeguard infants within the household."

There are three groups of diseases which together cause about three-fourths of all the deaths among babies. These three groups are:

1. Digestive diseases, which cause most of the deaths of babies in summer. Bottle-fed babies are most often affected.

2. Diseases of the lungs.

3. Diseases due to conditions affecting the child before or at birth.

Some of the causes of these diseases are:

1. Of the digestive diseases: Lack of breast feeding, improper feeding, impure milk, carelessness of mothers, hot weather, overcrowding, bad housing, and bad sanitary conditions.

2. Of the diseases of the lungs: Infections, bad air.

3. Of the diseases due to conditions affecting the child before birth: Sickness in the parents, overwork of the mother, improper care before or at birth.

"Because the United States differs from other civilized countries in having no general system of birth registration it is impossible to state with accuracy our proportionate loss, but we have the estimate of the Census Bureau that our actual loss last year was about 300,000 babies under 1 year of age, of whom at least half would now be living had we, as individuals and communities, applied those measures of hygiene and sanitation which are known and available. Here

is a vast and unmeasured loss of infant life due solely to individual and civic neglect. The economic and industrial significance of such a loss in the general scheme of social well-being is beginning to be realized. It was once thought that a high infant death rate indicated a greater degree of vigor in the survivors. Now it is agreed that the conditions which destroy so many of the youngest lives of the community must also result in crippling and maiming many others and must react unfavorably upon the health of the entire community."—First annual report U. S. Children's Bureau.

"Infant mortality is the most sensitive index we possess of social welfare and of sanitary administration."—Sir Arthur Newsholme.

How to prevent a high infant mortality rate.

We are told that about one-half of the deaths of babies under 1 year may be prevented. How can this be accomplished?

PART PLAYED BY PARENTS IN PREVENTING BABIES' DEATHS.

1. *Intelligent care by the mother.*—Every mother has a right to know the facts which science has made certain as to ways in which it is possible to protect babies from sickness and death.

"Give me intelligent motherhood and good prenatal conditions, and I have no doubt of the future of this or any other nation."—John Burns.

"In the education of the mother in the care of herself and her baby we have the strongest weapon for fighting infant mortality."—New York Milk Committee's report.

2. *Prenatal care of the mothers.*—The great group of deaths of babies from causes acting before or at birth can only be prevented by intelligent care by the mother of herself before birth; protection of the mother by her husband from overwork; skillful care at the time of confinement; health of both parents.

PART PLAYED BY THE COMMUNITY IN PREVENTING BABIES' DEATHS.

1. *Infant-welfare work.*—"Community action can remedy many conditions dangerous to the lives of infants. The purity of the water, the milk, and the food supply; the cleanliness of streets and alleys; the disposal of waste—all these are within the control of the community. But the public responsibility does not end merely in remedying physical conditions. There is a growing tendency on the part of municipalities to accept responsibility for furnishing information and instruction to its citizens through instructive visiting nurses, baby-welfare and consultation stations, and the distribution of literature for the guidance of others. Work for infant welfare is coming to be regarded as more than a philanthropy or an expression of good will. It is a profoundly important public concern which tests the public spirit and the democracy of a community. There is, perhaps, no better sign of the modernness of a city's administration than the proportion of its income which is assigned to the protection of infancy and childhood, though it is fair to remind ourselves that a large amount of invaluable volunteer work is going

on in many cities whose budgets show no item for this purpose. But, whether by public or private effort, the community increasingly accepts its share of responsibility for the healthfulness of individual dwelling places and their fitness for the rearing of children."—Second annual report, U. S. Children's Bureau.

The instruction of mothers through infant-welfare or milk stations and visiting nurses is the most important immediate work for the prevention of infant mortality.

"Infant-welfare stations afford an opportunity to give poor mothers the benefit of personal advice by experts in the care and feeding of infants. Wherever these have been in successful operation the infant mortality has been materially reduced. At these centers the mother receives instruction in the care and feeding of her child, both in sickness and in health. The necessity for breast feeding is emphasized, and, where this is impossible, the nurse on her visits to the home teaches the mother how to prepare the feedings. The importance of clean pasteurized milk is demonstrated, and at many stations such milk is furnished at a moderate cost. Germany now has 555 infant-welfare stations in 345 different localities; England has over 200, and before the war there were 77 in Belgium. In the entire State of New York, outside of the city of New York, there were in 1913 only 32 such stations in 12 different localities. The public-health commission, appointed by the governor, which drafted the present public-health law, recommended that 'each city with a population in excess of 10,000 and having an industrial population should have one infant-welfare station, and larger cities with an industrial population should have one such station for approximately each 20,000 inhabitants.'"—Circular of the New York State Department of Health, 1915.

2. *Public-health or visiting nurses.*—Where communities can not afford to support infant-welfare stations, even during the summer months, help given to the mothers in their homes by visiting nurses under the direction of the family physician does much good.

Little Mothers' Leagues are associations of girls in the upper grades of schools to whom instruction is given in the proper care and feeding of babies. Much good has been accomplished by them.

3. *Improvement of the milk supply.*—Each community should make certain that the milk provided for its babies is pure. This can be done only by the appropriation of sufficient money to insure a proper inspection of the milk supply.

4. *Sanitary conditions.*—Overcrowding, insanitary houses and streets, bad water, and bad sewerage are potent factors in causing a high infant mortality rate. The community is responsible for the protection of its babies from these dangers.

Baby week.

A baby week is a campaign with a twofold purpose: (1) To give the mothers and fathers of a community the opportunity of learning the most important facts with regard to the care of the baby; (2) to bring home to the community a knowledge of the facts regarding the needless deaths of its babies and a realization of the ways in which it must protect them.

A baby week should be a community campaign; each person in the community should feel that he or she has a part in it.

A baby week should not be a temporary flurry and excitement, but should lead to permanent work for the babies.

LETTER FROM THE MAYOR OF NEW YORK CITY TO THE CLERGY OF THE CITY.

CITY OF NEW YORK,
OFFICE OF MAYOR.

To the Clergy of New York City:

The week of June 20 to 26 has been set apart by a committee of citizens cooperating with the health department as a week for considering the needs of the infants of this city. It has been suggested that the clergy of the city call to the attention of their congregations the plans of the committee in charge of this excellent undertaking. Their purpose is to fix the attention, especially during this week, of the whole city on the proper care of babies, particularly during hot weather, in order to further reduce infant mortality.

It is hardly necessary for me to say that this program seems particularly fitting for the churches' support. Much has been accomplished within the last few years in the saving and protecting of child life in New York. In order that we may progress still further in reducing infant mortality and promoting the welfare of the children of the city, we must have the active cooperation of all citizens, and especially of the religious and civic organizations, which have so much concern for the city's welfare. I ask, therefore, that you bring this matter to the attention of your congregations, urging their cooperation with the committee in charge.

JOHN PURBOY MITCHEL, *Mayor.*

JUNE 17, 1914.

A CIRCULAR DISTRIBUTED TO TEACHERS IN WASHINGTON, D. C., AS BASIS FOR TALKS TO PUPILS ON LITTLE-MOTHERS' DAY.

1. *Bathing.*—Baby should be bathed every day because the skin of a baby is very tender, and very little irritation will cause trouble. Have everything ready before you begin the bath. Be sure the room is warm and that there are clean, dry, warm clothes ready to put on baby quickly after the bath. You will need a basin of warm water, soap, wash cloth, towels, powder, solution of boracic acid, and absorbent cotton.

Before undressing the baby bathe the eyes gently with boracic-acid solution. Cleanse each nostril with a twist of absorbent cotton moistened the same way. Next wash the face and ears with a wash cloth wrung out of the water and wipe at once with a thin soft towel. Then soap the head carefully, rinse off well, and dry.

Now undress the baby and soap it all over quickly. Then put baby in the tub, rinse all the soap off well, and lift baby out and dry. The time in the water should not be more than 2 minutes.

2. *Feeding.*—Every baby should be fed on mother's milk for the first few months. It has just the right things in it to make the baby strong and well. It is always ready, always warm, and always clean and free from germs. Baby should be fed regularly, every three or four hours. Baby should not have anything else to drink except cool boiled water. If baby can not be nursed it should be fed on a modification of cows' milk. The mother should be sure the milk she buys for the baby is clean and cold and safe. Dirty milk may kill the baby. The doctor must tell the mother how to prepare this milk. She must have everything very clean that she uses to fix the milk in, and as soon as it is fixed it should be put in the ice box and kept there. The mother should never put the nipple in her mouth. The bottles must be kept very clean. The greatest care must be taken that the baby's food does not stand in the sun or get dirty and that no flies come near it.

3. Sleeping.—A young baby should sleep practically all the time, except when it is being fed or bathed. It should always sleep alone in a basket or crib; never in the bed with its mother. It should never sleep in a room with the window closed. It is a very good plan to let the baby sleep out of doors in the daytime if it is well wrapped and protected from the wind. When the baby gets a little older it should sleep straight through from 6 p. m. to 6 a. m., and should have a long nap in the morning and again in the afternoon. The more sleep the baby and growing child have, the stronger they will be. They should never be kept up in the evening.

Baby will be well and happy if he—

- Has the right food.
- Has a bath every day.
- Is kept dry and clean.
- Has his meals served on time.
- Sleeps alone in a quiet, cool place.
- Breathes fresh air day and night.
- Is given pure, cool water to drink.
- Is dressed according to the weather.
- Is protected from flies and mosquitoes.
- Is kept away from sick folks and crowds.
- Does not have to be shown off for visitors.
- Is not kissed on the mouth, even by his mother.

Baby will be unhappy and cross if he—

- Is given a pacifier.
- Is allowed to go thirsty.
- Is taken up whenever he cries.
- Is fed at the family table.
- Is kept up late.
- Is not kept dry and clean.
- Is bounced up and down.
- Is taken to the movies.
- Is dosed with medicine.
- Is teased and made to show off.
- Is bothered by flies and mosquitoes.
- Is not a fresh-air baby.

It is easier to keep baby well than to cure him when he gets sick.

ARTICLES IN THE CHILDREN'S BUREAU EXHIBIT ON INFANT CARE AT THE PANAMA-PACIFIC EXPO- SITION.

Clothing for the baby.

Hot-weather costume.—Cotton band and diaper.

Winter costume.—Shirt, diaper, band, stockings, shoes, skirt, slip, night-gown, and wrapper.

Two dolls dressed in these costumes.

Sleeping arrangements.

Homemade crib for young baby.—Clothes basket, mattress of silence cloth, mattress cover, rubber sheeting, sheets, blankets. Such a crib is described and illustrated in *Infant Care*, United States Children's Bureau publication No. 8, page 12.

Crib for older baby.—Iron crib with high sides, mattress, bedding as above, mosquito netting to cover bed.

Bathing arrangements.

A washable "hospital" doll, which may be used by the nurse in demonstrating the baby's bath, low table and chair, bathtub, pitcher for warm water, bath thermometer, towels, wash cloths, bath apron, bath accessories—good soap, vaseline, talcum powder, boric acid, absorbent cotton.

Objects needed for preparation of modified milk.

Portable gas stove, two burners (electric plate may be used), nursing bottles (8-ounce cylindrical), nipples, covered glass for nipples, clean corks, bottle brush, graduated measuring glass, two quart pitchers, one funnel, long-handled spoon for stirring, pail or kettle for pasteurizing milk, and sterilizing utensils (for home pasteurizers and use, see Infant Care, pp. 40-46), tablespoon, double boiler for cooking cereals.

Scale for weighing baby.

Scale having balance beam and platform; suitable basket or pan on platform for holding baby.

Playpen for older babies.

For description, see Infant Care, Children's Bureau publication No. 8, page 24.

ARTICLES WHICH HAVE BEEN USED IN BABY-WELFARE EXHIBITS.

Homemade ice box. (See Infant Care, p. 41.)

Homemade fireless cooker. (See Circular 776, States Relations Service, U. S. Department of Agriculture.)

Homemade iceless refrigerator. (See Circular 778, States Relations Service, U. S. Department of Agriculture.)

Good and bad school luncheons shown in Corpus Christi (Tex.) baby-week exhibit.

GOOD SCHOOL LUNCHEONS.

I.

Egg sandwich.
Brown bread and butter.
Mold of apple tapioca.
Orange.

II.

Chicken-salad sandwich.
Crisp finger roll.
Nut and date sandwich.
Apple.

III.

Cheese sandwich
Apple and celery sandwich.
Sponge cake.
Orange.

IV.

Club sandwich.
Graham bread and butter.
Jelly roll.
Apple.

V.

Peanut-butter sandwich.
Raisin and apple sandwich.
Candy.
Orange.

BAD SCHOOL LUNCHEONS.

I.

Hard fried egg.
Thick soda biscuit.
Apple pie.
Banana.

II.

Sausages.
Dill pickles.
Soggy rolls.
Raw onions.
Doughnuts.

Homes of Do Care and Don't Care families.

An interesting feature of an exhibit is the display of good and bad kitchens or good and bad nurseries, which reproduce typical rooms to be found in the town where the exhibit is held.

Two rooms, approximately 8 to 10 feet square, are constructed and furnished to represent two contrasting kitchens or nurseries. The furnishings must be similar, but while that belonging to Mrs. Do Care is shown in model order, the other, belonging to Mrs. Don't Care, is carelessly or ignorantly cared for. It is not advisable, however, to make the contrasts so extreme that both seem unreal.

CONTRASTS.

DO CARE.

Neat and clean wall paper.
Windows screened.
No flies.
Milk covered.
Clean stove.
Dust cloths, etc.

DON'T CARE.

Ugly and untidy wall paper.
No screens.
Flies.
Milk uncovered.
Dirty stove.
Feather duster, etc.

TITLES OF PANELS IN SEVERAL BABY-WELFARE EXHIBITS.

Children's Bureau.

Baby's Rights.
Care Before Birth.
Nursing the Baby.
Mother's Milk.
What Mother's Milk Did for This Baby.
Artificial Food.
Baby Needs Air.
Colds and Pneumonia.
Baby's Foes.
When Mother Works.
Low Wages.
Mothers' Pensions.
In the Same Town.

New York State Department of Health.

The Necessity of Healthy Parents.
Birth Registration—Importance of birth certificates.
Birth Registration—Proof of age required by civil service and some employers.
Infant Mortality—Electric flash light going out every time a baby dies in the civilized world.
Necessity of Breast Feeding.
Health Creed for a Well Baby.
Pasteurized Milk.
Care of Milk in the Home.
Dangerous Soothing Syrups.
Dangerous Foods.
Fresh Air for the Baby.
Where Babies Die (housing conditions).
The Fly Pest.
Vaccination.
Prevention of Blindness in Babies.
Common Colds—What they may lead to.
How Colds are "Caught."
How to Handle the Baby.
Bathing the Baby.
Education of the Mother Will Reduce the Infant Death Rate in Your City.
Infant-Welfare Stations—Their value.

Pittsburgh baby-week exhibit.

Prenatal care:

How to Save the Babies.

Care Before Birth.

The Working Mother.

Why the Baby Died.

Father Pitt Offers the Mothers Advice and Help in Caring for the Babies.

Birth:

Babies' Sore Eyes.

Prevent Sore Eyes.

Regulation of Midwives.

Baby's Rights.

Feeding:

Why Baby Should Be Nursed.

Mother's Milk.

Nursing the Baby.

What a Patent Food Did for This Baby.

Artificial Food.

Milk:

Dangerous Milk.

Dairy and Milk Inspection.

Certified Milk—What it is.

Certified Milk—Method of supervision.

Care of mother and baby:

Causes of Baby Deaths.

Catching Diseases.

Measles and Whooping Cough.

Light and Air.

Flies.

Saving babies:

Baby-Welfare Week.

Little Mothers.

Work of Nurse.

The Nursing Bottle.

Happy Babies.

Russell Sage Foundation, department of child helping.

All Births Should be Registered.

Our Country's Faulty Records.

A Baby Dies in the United States Every Time This Star Fades.

Baby's Pilgrim's Progress Through the Valley of the Shadow of Death.

How to Save Babies.

The Beginning of Life.

Mother's Milk.

What Mother's Milk Did for These Babies.

What a Patent Food Did for These Babies.

Artificial Feeding.

Feeding the Baby.

Flies are Carriers of Disease.

Colds.

Whooping Cough.

Measles.

TRAVELING EXHIBITS, LANTERN SLIDES, AND EDUCATIONAL LITERATURE OBTAINABLE FROM VARIOUS SOURCES.

Exhibit material in many cases is lent free, if transportation is paid. In some cases a small rental fee is asked in addition. Many of the small poster exhibits may be purchased at a low price. In most cases the condition is made that broken lantern slides shall be paid for by the borrower. Further information may be obtained from the secretaries of the organizations. Applications for exhibit material and lantern slides should be made as long as possible in advance.

For leaflets and pamphlets write to the publishing agency as here indicated.

The Children's Bureau can supply only its own publications and material.

**Childrens' Bureau, United States Department of Labor,
Washington, D. C.**

Exhibit material.—Twelve wall charts on infant welfare mounted on linen, 20 by 40 inches.

Lantern slides.—Set of 50 lantern slides on infant care, each slide having an appropriate label of explanation; no outline for lecture.

Motion-picture film.—A Day in Baby's Life. A film giving details of the care of the baby; suitable to serve as accompaniment to a lecture to women or young girls on the care of the baby. Film can not be lent, as it is worn out, but upon request permission will be given to departments of health and private organizations to have copies of the film made from the negative. Length of film, about 1,500 feet.

Bulletins, etc.:

Prenatal Care.—A 35-page bulletin dealing with the care of the mother during pregnancy.

Infant Care.—An 81-page bulletin dealing with the care of babies up to 2 years of age.

Child Care.—(In preparation.)

Maternal Mortality from all Conditions Connected with Childbirth.

Baby-Week Campaigns.

Child-Welfare Exhibits: Types and preparation.

Birth Registration.

A Tabular Statement of Infant-Welfare Work in the United States.

How to Organize a Children's Health Conference. (In press.)

For a complete list of all Children's Bureau publications, see pages 2 and 3 of cover.

Other forms of assistance in a baby-week campaign:

Press material on baby week.

Press material on birth registration.

Leaflet of directions for carrying out a birth-registration test.

Outline of suggestions for programs on The Community and the Child.

Circular of information about motion-picture films on child-welfare subjects.

Information about organizing Little Mothers' Leagues.

Information about equipment, etc., of infant-welfare stations.

United States Public Health Service, Washington, D. C.

Lantern slides.—Two thousand views dealing with various public-health problems; 80 slides on the subject of milk.

Bulletins, etc.:

Care of the Baby.—Public Health Reports, Supplement No. 10. 14 pp.

Same, printed in Slovak.

Summer Care of Infants.—Public Health Reports, Supplement No. 16. 15 pp.

A number of publications on such subjects as children's diseases, infantile paralysis, malaria, tuberculosis, typhoid fever, open-air schools, milk, water, etc., closely related to baby welfare, are also available for distribution. A complete list will be furnished on request.

**Office of Home Economics, States Relations Service, United
States Department of Agriculture, Washington, D. C.**

Exhibit material.—Food and diet charts in colors; useful in exhibits on the subject of food for young children. To be obtained from the Superintendent of Documents, Washington, D. C. The set of 15 charts, \$1; single charts not sold separately.

Bulletins, etc.:

Food for Young Children.—Farmers' Bulletin 717.

School Lunches.—Farmers' Bulletin 712.

American Association for Study and Prevention of Infant Mortality, 1211 Cathedral Street, Baltimore, Md.

Exhibit material.—(a) General traveling exhibit. Scope—Illustrates causes and extent of baby sickness and death; how to keep the baby well; right food for the baby; baby life-saving stations. Contents—35 panels; 5 single introductory panels; 6 cabinet screens, each of which holds 5 panels; no wall attachments. Space required, 80 linear feet; 4 feet from wall to exhibit; walls must be at least 10 feet high. Weight, 1,550 pounds; packed in 8 boxes; usually shipped by freight. (b) Parcel-post exhibit. Photographic reproduction of general traveling exhibit; 20 wall panels, unframed, mounted on muslin; size, 34 by 42 inches; weight, 15 pounds.

Lantern slides.—Collection of 50 slides, based on traveling exhibit, accompanied by brief descriptive statement.

Leaflets, etc.:

Motherhood.—A 6-page leaflet on prenatal care.

Care of the Baby.—Educational leaflet No. 1. 4 pp.

American Medical Association, Council on Health and Public Instruction, 535 North Dearborn Street, Chicago, Ill.

Exhibit material.—(a) Fifteen exhibit panels, 25 by 38 inches, printed on durable paper. These panels are reproductions of exhibit panels prepared by the Children's Bureau and the American Association for Study and Prevention of Infant Mortality. Sent by parcel post. Price list upon application to the secretary of the council on health and public instruction. (b) Cartoons on public health, available for exhibits; cuts of the same.

Pamphlets, score cards, record sheets, etc.:

Save the Babies.—Pamphlet No. 7. Pamphlet on the care of babies. 19 pp.

Summer Care of Babies.—Twenty-four page pamphlet.

Score cards for use in baby-health conferences.

Record sheets for use in baby-health conferences in which score cards are not used.

Baby Health Conferences.—Pamphlet No. 5. Description of the methods of holding baby-health conferences according to the score card of the American Medical Association.

Anthropometric Table.

Sample copies and price list are furnished on application to the secretary of the council on health and public instruction; also price list of packages made up with the number of each of the publications named above necessary for baby-health conferences of various sizes. Requests for material should be made as long in advance as possible.

American Red Cross Town and Country Nursing Service, Washington, D. C.

Exhibit No. I.—Six cabinets, photographs and models relating to public-health work of nurse; each cabinet 8 feet 6 inches by 34 inches by 10 inches; includes one cabinet on infant-welfare work; weight, ready for shipment, 1,200 pounds.

Exhibit No. II.—Thirteen panels 2 feet by 2 feet 6 inches on activities of the visiting nurse in rural communities and small towns. Two panels on infant-welfare work; to be hung in tiers of three; requires 13 by 6 feet wall space.

Lantern slides.—Forty-six on work of visiting nurse in rural districts and small towns.

Motion-picture film.—Two copies on work of visiting nurse in rural districts and small towns.

Pamphlets, etc.—Circular 117. Four-page illustrated circular on the work of the Town and Country Nursing Service of the American Red Cross.

National Association for the Study and Prevention of Tuberculosis, 105 East Twenty-second Street, New York, N. Y.

Exhibit material.—Exhibit chart for use in schools.

Lantern slides.—One hundred and eighty-three lantern slides on tuberculosis and public health.

Circulars with regard to motion-picture films and lantern slides furnished on request.

Motion pictures.—Rental service of five motion-picture films on tuberculosis and public health. Of these, *The Temple of Moloch* and *The Great Truth* especially show the need for the protection of children from tuberculosis.

Leaflets, etc.—A number of health plays for children in leaflet form. (See p. 134.)

In writing for information a stamp should be inclosed for reply.

Russell Sage Foundation, Department of Child Helping, 130 East Twenty-second Street, New York City.

Lantern slides.—Sixteen lantern slides on visiting nursing.

Leaflets, etc.—*The Care of the Baby.* Six-page leaflet.

National Committee for the Prevention of Blindness, Room 510, 130 East Twenty-second Street, New York City.

Exhibit material.—Two exhibits: (1) *Ophthalmia neonatorum* (babies' sore eyes); (2) *midwives*. Each exhibit five panels; bromide photographs mounted on compo board and framed; approximately 18 inches wide by 38 inches high; wall space required, width 7 feet 6 inches; height, 3 feet 4 inches. Publication No. 4, describing and illustrating exhibits in detail, may be had upon application.

Lantern slides.—Seventy-seven on babies' sore eyes. Synopsis of a lecture or a complete lecture supplied on request. Write for Publication No. 7 and inventory of slides.

Leaflets, etc.—

Needlessly Blind for Life.—Four-page leaflet on prevention of blindness from babies' sore eyes (*ophthalmia neonatorum*).

Common Causes of Blindness in Children and the Means and Methods of Prevention.—Sixteen-page pamphlet, illustrated.

What Women's Clubs and Nursing Organizations Can Do to Prevent Blindness.—Four-page leaflet.

Saving the Sight of Babies.—A lecture outline, illustrated.

Summary of State Laws and Rulings Relating to the Prevention of Blindness from Babies' Sore Eyes.

Will contribute moderate supply of first three mentioned publications free. Prices of quantity lots on application. Single copies of last two on request. Applications for large quantities should be made at least two months in advance of date when needed.

American Social Hygiene Association, 105 West Fortieth Street, New York City.

Exhibit material.—(a) Set of 10 colored panels on social hygiene, size 17 by 24 inches. (b) Set of photographs of this series of panels, suitable for small exhibits. (c) Single wall panel, 40 by 28 inches.

Lantern slides.—Set of 10, reproducing exhibit panels. Additional lantern slides on social hygiene.

Pamphlets.—Eight pamphlets on social hygiene.

National Child-Welfare Exhibit Association, 70 Fifth Avenue, New York City.

Exhibit material.—Thirteen colored posters, 18 by 28 inches, Care Before Birth, Care at Birth, The Best Food, The Best Substitute, Feeding the Baby, Bathing the Baby, Clothing the Baby, Fresh Air and Exercise, The Baby Asleep, Things to Avoid, Milk, Midwives, Birth Registration. Also, 12 posters on childhood and health, what to eat and what not to eat, care of the eyes, care of the teeth, correct breathing, and disease prevention.

Lantern slides.—Set of 13, reproducing posters on care of baby; set of 12, reproducing posters on childhood and health.

Educational Exhibit Co., 26 Custom House Street, Providence, R. I.

Exhibit material.—Parcel-post exhibits and other exhibits for sale and rental; models and devices; pin-map supplies; materials for chart-making.

Lantern slides.—Several sets on baby welfare, milk, flies, child hygiene, etc.

A baby-week catalogue, giving details as to exhibit material and lantern slides, is sent on request.

Public Service Exhibit Bureau, 123 West Madison Street, Chicago, Ill.

Exhibit material.—For information address secretary.

Public-Health Nurse Quarterly, 612 St. Clair Avenue NE., Cleveland, Ohio.

Lantern slides.—Fifty lantern slides on public-health nursing. Sixty lantern slides on child welfare, which include maternity, infant welfare, the child from 2 to 6, and school hygiene. Lectures accompany slides.

The Child Federation, 1014-16 Witherspoon Building, Philadelphia, Pa.

Exhibit material.—Set of 8 charts, 28½ by 22½ inches, printed on cardboard. Subject, baby saving.

**ASSISTANCE OFFERED BY STATE AUTHORITIES
THROUGHOUT THE COUNTRY.**

ALABAMA.

State Board of Health, Montgomery.

Bulletins.—On the Baby, Diphtheria, Care of the Baby.

Lantern slides, lecturers, press articles.

ARIZONA.

University of Arizona, Department of Social Science, Tucson.

Lecturers, press articles.

ARKANSAS.

University of Arkansas, College of Agriculture, Extension Division, Fayetteville.

One, possibly two, lecturers.

Press articles.

CALIFORNIA.

State Board of Health, Sacramento.

Special bulletin on child welfare; pamphlets on milk production, sanitation, and flies.

Twenty-five panels on infant welfare.

One hundred lantern slides on public health, milk sanitation, tuberculosis.

COLORADO.

State Board of Health, Denver.

Lantern slides, 4 dozen on infant hygiene.

Two motion-picture films.—The Man Who Learned, The Fly Pest.

Lecturers supplied to a limited extent.

University of Colorado, Extension Bureau of Community Welfare, Boulder.

Exhibit material, including 13 child-welfare charts. Sent for transportation charges.

Lecturers. Traveling expenses to be paid locally. Arrangements to be made one month in advance.

Programs for organization and management of baby-health conferences and community-welfare campaigns.

Press articles.

CONNECTICUT.

State Board of Health, Hartford.

Leaflets.—Care of Baby, etc.

Two exhibits, posters, wall charts.

Eighty lantern slides on infant care, the fly, housing, milk.

Lecturers, press articles.

Connecticut Agricultural College, Extension Service, Storrs.

Press articles.

DELAWARE.

State Board of Health, Wilmington.

Press articles.

FLORIDA.

State Board of Health, Jacksonville.

Pamphlets.—Prevention of Ophthalmia Neonatorum, Vital Statistics, Baby Welfare, Save the Babies.

Exhibit train, 3 cars; much material upon infant and child welfare. Itinerary must be arranged in advance and must include towns in same general locality or upon same railroad.

Small exhibit, wall panels on infant welfare, tuberculosis, and flies.

Parcel-post exhibits, 8 on tuberculosis, 7 on typhoid.

About 400 lantern slides on general health, including many on infant welfare.

Twelve motion-picture films.—The Long Versus the Short Haul, Tommy's Birth Certificate, Cattle-Tick Eradication, Hope, The Temple of Moloch, The Price of Human Life, Toothache, The Typhoid Story, The Fly Pest, The Fly Danger, War on the Mosquito, The Rat Menace. Films in use with exhibit trains.

Twelve district public-health nurses and eight assistants to State health officer detailed upon request to assist in planning and carrying out programs through lectures, personal talks, assistance at baby-health conferences.

Programs, press articles.

GEORGIA.

State Board of Health, Atlanta.

Bulletins and circulars.—Mother and Child, Keep the Baby Healthy During the Summer, Some of the Causes of Infant Mortality.
Cartoons, specimens, models. Sent for transportation charges.
Fifty lantern slides on dairying, blindness, diphtheria, flies.
Lecturers, press articles.

University of Georgia, School of Education, Athens.

Lecturers, press articles.

IDAHO.

State Board of Health, Boise.

Leaflet.—If You Have a Baby.

University of Idaho, Department of Home Economics, Moscow.

Lecturers, programs.

ILLINOIS.

State Board of Health, Springfield.

Booklet, Our Babies: How to Keep Them Well and Happy; bulletin, How to Organize and Conduct Baby-Health Conferences; circulars, Helpful Hints for Baby Week.
Wall exhibit, illustrated hand-colored posters.
One hundred and fifty lantern slides on baby welfare, birth registration, general sanitation, milk.
Two motion-picture films.—Tommy's Birth Certificate, Summer Babies.
Lecturers, press articles.

University of Illinois, Department of Household Science, Extension Service, Urbana.

Charts, used by lecturer in health talks.
Lantern slides, used by lecturer in health talks.
One lecturer, a graduate nurse.
Programs, press articles.

INDIANA.

State Board of Health, Indianapolis.

Booklet, Indiana's Mothers' Baby Book. Pamphlets and circulars.—Care of the Baby in Hot Weather, Flies and the Baby.
Folding exhibit of 24 cards, 50 large charts.
Three hundred lantern slides.—Milk, flies, sanitary homes.
Two motion-picture films.—The Man Who Learned, Flies and Babies.
Four lecturers; also available for examining babies at health conferences.
Press articles.

Purdue University, Department of Agricultural Extension, Home Economics Division, Lafayette.

A number of publications sent out in response to requests. Not available for distribution in large numbers.
Exhibit material used by lecturers.
Lecturers.
Programs; staff will confer with committees.
Press articles.

IOWA.

State Board of Health, Des Moines.

Bulletin.—Save the Babies.
Thirty charts.

State University of Iowa, Extension Division, Bureau of Social Welfare, Iowa City.

Bulletins.—Iowa Handbook on Child Welfare, Child-Welfare Survey, and Bibliography. Typed instructions for conducting baby-health conference or demonstration.

One hundred wall charts, 3 by 5 feet; 25 placards. Sent for transportation charges.

A few lantern slides used by lecturers.

Lecturers. Traveling expenses to be paid locally.

Programs, press articles.

Iowa State College of Agriculture and Mechanic Arts, Extension Department, Home Economics Committee, Ames.

Pamphlets.—The Child and Its Care; The Child Outline for Club Study; Feeding the Child from Nine Months to Two Years; Feeding the Child from Two to Three Years; Feeding the Child of Six.

Lecturers.

Very complete set of suggestions and programs.

Press articles.

KANSAS.

State Board of Health, Division of Child Hygiene, Topeka.

Bulletin on child hygiene. Pamphlets.—Breast Feeding; Bottle Feeding; Feeding After the First Year; Clothing, Bathing, and Care; Fresh Air and Rest; and Habits, Training, and Discipline.

Large panel exhibit, 6 screens, 4 panels each, suitable for elaborate campaigns. Transportation expenses, both ways, and any loss due to carelessness in packing and handling to be paid locally. Portion of large exhibit material reproduced in 12 illustrated colored posters. Set sent free to any resident of State. Limited number available for sending outside State on receipt of postage (3 cents a set). Infant's layette exhibit, life-size doll, entire set correct baby clothes, packed in suit case. Sent for transportation charges.

Lantern slides.—A Square Deal for the Baby; Tuberculosis; Clean Milk and Safe Milk; The Filthy Fly; Fakes and Fakery; Community Sanitation; Conservation of Vision; Man and the Microbe. Memoranda for lectures accompany slides. Recipient to pay transportation charges both ways and 25 cents for each broken slide.

Five motion-picture films.—The Long Versus the Short Haul; The Man Who Learned; Tuberculosis; Typhoid Fever; The Fly. Recipient to pay transportation charges and guarantee reimbursement for loss or damage to films.

Lecturers, secretary and members of State board of health, and the directors of six divisions of the State board.

Programs, press articles.

Kansas State Agricultural College, Home Economics in Extension Division, Manhattan.

Cooperates with State board of health in supplying leaflets, etc.

Lantern slides on tuberculosis and milk production.

Three motion-picture films.—John Brand; An Interrupted Romance; Development of the Fly.

Lecturers, programs, press articles.

University of Kansas, Child-Welfare Department, Lawrence.

Lecturers.

KENTUCKY.

State Board of Health, Bowling Green.

Pamphlets on public-health subjects.

Exhibit material, sent for transportation charges; deposit required, from which deduction is made for damage.

Lantern slides.—Seven thousand lantern slides on public-health subjects.

Lecturers, outlines, press articles.

State University of Kentucky, College of Agriculture, Department of Home Economics, Lexington.

Exhibit material, lecturers, programs, press articles.

LOUISIANA.

State Board of Health, New Orleans.

Bulletins.—The Baby; Flies; Milk. Pamphlets.—How to Keep the Baby Well; Save the Babies.

Exhibit car on educational hygiene; one-third space to infant welfare. Large colored framed posters.—Baby Dont's; Baby Needs; Food, Milk; Registration; Patent Medicine. Models.

One hundred lantern slides on milk, dairies, sanitary and insanitary homes, safety first for the baby.

Three motion-picture films.—Summer Babies; The Fly; Milk.

Lecturers, programs, press articles.

MAINE.

State Board of Health, Augusta.

Bulletins.—The Feeding and Care of the Baby. Series of leaflets.—Health of Home and School.

Charts.

More than 2,000 lantern slides on 20 topics, many on child welfare. Memoranda for several lectures on child welfare accompany slides.

Lecturers, programs, press articles.

University of Maine, College of Agriculture, Department of Home Economics, Orono.

Lecturers.

MARYLAND.

State Department of Health, Baltimore.

Lantern slides.

Staff of State board available for consultation.

Maryland Agricultural College, Extension Division, College Park.

Lecturers, programs, press articles.

MASSACHUSETTS.

State Department of Health, Boston.

Bulletin.—The Baby and You. Health Creed. Leaflets in foreign languages. Child-welfare exhibit.—Twenty panels, models.

About 500 lantern slides, including duplicate sets on child welfare, public-health nurse, milk, how to keep well, school hygiene.

Four motion-picture films.—The Long Versus the Short Haul, The Price of Thoughtlessness, Toothache, Fly Danger.

Lecturers supplied to a limited extent.

Programs, press articles.

Massachusetts Agricultural College, Extension Service, Home Economics Division, Amherst.

Three lecturers, programs, press articles.

MICHIGAN.

State Board of Health, Lansing.

Bulletins.—What About the Babies, Public Health.

Extensive exhibit, many mechanical devices, wall charts. Photographs of entire exhibit available.

Two-hundred lantern slides on infant-welfare topics.

Four motion-picture films, including The Man Who Learned, The Long Versus the Short Haul, The Fly.

Lecturers, programs, press articles.

Michigan Agricultural College, Division of Home Economics, East Lansing.

Lecturers, press articles.

MINNESOTA.

State Board of Health, St. Paul.

Lecturers supplied to a limited extent.

University of Minnesota, Department of Agriculture, Division of Home Economics, St. Paul.

Pamphlet.—Care of the Baby.

Wall charts.—Suggestions on clothing.

Will prepare infant-feeding exhibit for some central exhibition.

Lecturers.

MISSOURI.

University of Missouri, Extension Division, Department of Home Economics, Columbia.

Exhibit consisting of baby basket, model outfit baby clothing; five sets available. Sent for transportation charges.

Lecturers. If several talks arranged for same trip university meets traveling but not local expenses.

Programs, press articles.

University of Missouri, Department of Preventive Medicine, Columbia.

One hundred and fifty lantern slides on milk, baby clinic, etc.

Lecturers, programs, press articles.

MONTANA.

State Department of Health, Helena.

Special bulletin on baby welfare.

Charts.

One hundred lantern slides on child welfare.

Lecturers, programs, press articles.

Montana State College of Agriculture and Mechanic Arts, Extension Service, Bozeman.

Printed material for distribution.

Charts and panels.

Lecturers. College pays traveling but not local expenses.

Press articles.

NEBRASKA.

State Board of Health, Lincoln.

Press articles.

University of Nebraska, College of Agriculture, Extension Service, University Farm, Lincoln.

Extension service circulars.—Mother and Baby, Care and Feeding of Children, Feeding of Children, Children's Clothing. College of Medicine pamphlets.—Hygiene of the Child, Home Nursing for Babies, Colds, Whooping Cough, Measles, Scarlet Fever, Diphtheria.

Wall charts, printed on muslin, large type. Sent for transportation charges.
Set of posters made at cost of 10 cents each, as a suggestion for local clubs.

Lantern slides, used by lecturers.

One motion-picture film.—Better Babies. Sent for transportation charges.
Ten lecturers, programs, press articles.

NEVADA.

University of Nevada, Agricultural Extension Division, Department of Home Economics, Reno.

Charts, sent for transportation charges.

Lecturers, press articles.

NEW HAMPSHIRE.

State Board of Health, Concord.

Infant-welfare number of quarterly bulletin.

A few lantern slides on general hygiene.

New Hampshire College of Agriculture and the Mechanic Arts, Extension Service, Durham.

A few charts on handling and distribution of milk.

Lecturers, press articles.

NEW JERSEY.

State Department of Health, Division of Child Hygiene, Trenton.

Leaflets.—Is Your Baby Registered? How to Grow Prize Babies, A Community Problem. Others issued when occasion requires.

Large traveling exhibit accompanied by demonstrators, 2 sets of panels; sent for transportation charges.

Large number of lantern slides on tuberculosis, housing conditions, milk, sewage disposal. A few on infant welfare.

Seven motion-picture films. (May not be available for local campaigns.)

Lecturers, program, series of press articles.

NEW YORK.

State Department of Health, Division of Child Hygiene, Albany.

Pamphlets.—Your Baby—How to Keep It Well, Before the Baby Comes, The New Born Baby, The Summer Care of Babies, Care of Milk in the Home, Artificial or Bottle Feeding, From the Bottle to Table Food, Avoid Infection. Available in limited numbers.

Two sets of 19 panels, 3 by 5 feet, on infant welfare, available only for use within New York State. Are intended to form part of intensive campaign in which department nurses, lecturers, and others participate.

One set of 25 panels on infant welfare, available for small communities in New York State.

Lantern slides.—Three sets infant welfare proper; one oral hygiene; two flies; two sanitary conditions; two public-health nursing; large number on other subjects. Three stereopticon lanterns adapted for use of electricity, available for lending with slides. Material available for use only in New York State.

Three motion-picture films.—Bringing It Home, one reel, showing necessity for prenatal instruction; The Trump Card, one reel, on clean milk and dairies; Our Baby, one reel, humorous recital of events in one day of a baby's life; one reel on oral hygiene. Portable motion-picture projector available under certain conditions. Material only for use in New York State.

Lecturers on all phases of infant welfare.

Several sets of press articles. Is prepared to study local conditions and prepare special publicity material.
Prepared to map out complete campaign, providing programs, exhibit material, lecturers, publicity, etc.

New York State College of Agriculture at Cornell University, Department of Home Economics, Ithaca.

Bulletins.—Care and Feeding of Children (limited number available), Health of Children, School Lunches.
Lecturers supplied to a limited extent.
Programs.

NORTH CAROLINA.

State Board of Health, Raleigh.

Pamphlets.—Care and Feeding of Babies, How to Keep Your Baby Well.
Three standard cabinet exhibits. Recipient to pay transportation and traveling expenses of demonstrator.
Seventy lantern slides on care and feeding of children.
Two motion-picture films.—Summer Babies, A Day in a Baby's Life.
Lecturers, programs, series of press articles.

University of North Carolina, Department of Rural Economics and Sociology, Chapel Hill.

Programs, press articles.

NORTH DAKOTA.

State Board of Health, Devils Lake.

One motion-picture film.—Error of Omission.

North Dakota Agricultural College, Extension Department, Agricultural College.

Bulletin.—The Baby.
One trained nurse, to lecture. Staff also available to a certain extent.
Programs, press articles.

OHIO.

State Board of Health, Division of Child Hygiene, Columbus.

Pamphlets on care of babies, communicable diseases, tuberculosis, etc.
Twelve wall cards 30 by 40 inches; 12 cards 20 by 30 inches. Exhibit of proper clothing for babies.
Five motion-picture films.—The Long Versus the Short Haul, Error of Omission, Summer Babies, The Man Who Learned, The Visiting Nurse.
Lecturers, programs.

Ohio State University, Extension Service, Department of Home Economics, Columbus.

Exhibit material, lecturers, programs, press articles.

OKLAHOMA.

State Department of Public Health, Guthrie.

Booklet addressed to mothers.
Lecturers, programs, press articles.

OREGON.

State Board of Health, Portland.

Leaflets.—Are Your Baby's Eyes Sore? The Expectant Mother.
Programs, press articles.

Oregon Agricultural College, School of Home Economics, Domestic Science Department, Corvallis.

Bulletins.—Food for the Family, The School Luncheon.
Ten charts on feeding and care of the child, growth and development.
Twenty-five lantern slides on infant care and feeding.
Lecturers, programs, press articles.

University of Oregon, Extension Division, Eugene.

Will issue bulletins to meet any demands on specific subjects.
Exhibit material, lecturers, press articles.

PENNSYLVANIA.

State Department of Health, Harrisburg.

Pamphlets.—How to Organize a Baby Show, Pennsylvania's Eugenic Marriage Law, Flies as a Factor in Infant Mortality, Diphtheria and Diphtheria Antitoxin, Reproduction and Race Betterment. Leaflets and circulars.—Cleanse the Teeth, Flies. In foreign languages.—Save the Baby, Blindness in Infants, Home Milk Supply, Birth Registration.
Exhibit material. Gives help to committees in constructing local exhibits.
Lecturers, programs, press articles.

RHODE ISLAND.

State Board of Health, Providence.

Pamphlet.—Care of Babies. Leaflet.—How to Take Care of Babies. Little Mothers' Leagues Handbook (prepared by Rhode Island State Federation of Women's Clubs).
Exhibit material on milk and on mouth hygiene.
Fifty lantern slides on milk; 50 on care of babies.
Three motion-picture films.—The Man Who Learned, Summer Babies, Boil Your Water.
One lecturer, press articles.

SOUTH CAROLINA.

State Board of Health, Columbia.

Literature on baby welfare, clean milk in home.
Fifty lantern slides on sanitation of the home, the house fly.
Lecturers, programs.

SOUTH DAKOTA.

State Department of Health, Waubay.

The Mother's Book.

University of South Dakota, Extension Department, Vermillion.

Three lecturers, programs.

TENNESSEE.

State Board of Health, Lebanon.

Literature on diseases of infancy.
Three lecturers, programs, press articles.

University of Tennessee, College of Agriculture, Division of Extension, Home Economics Department, Knoxville.

Lecturers, press articles.

TEXAS.

State Board of Health, Austin.

Exhibit on public health; 40 charts on baby care, accompanied by memoranda for lectures.

Lantern slides.

Two motion-picture films.—Teeth, The Fly.

Lecturers, programs, press articles.

Agricultural and Mechanical College of Texas, Department of Home Economics, College Station.

Give suggestions to committees for preparation of local exhibits in rural communities.

One member available for lectures in rural communities.

Programs, press articles.

University of Texas, Department of Extension, Austin.

Pamphlets.—How to Conduct a Baby-Health Conference, Instructions to Examiners, What the Baby Conferences Teach, Pure Milk and How to Get It, Why Register Births and Report Cases of Sickness, Suggestions for Infant Feeding, Food for Growing Children. Leaflet.—Things Worth While for the Baby.

Three sets of charts, 12 panels each, on care and feeding of children. Sent for transportation charges.

Lecturers supplied to a limited number of places. Application must be made several weeks in advance.

Programs, press articles.

UTAH.

State Board of Health; Salt Lake City.

Circular.—Save the Baby.

Forty lantern slides on care of infant, milk supply, and general subjects.

Lecturers, programs, press articles.

Utah Agricultural College, Extension Division, Home Economics Department, Logan.

Leaflet.—The House Fly.

Charts on Flies.

Lantern slides.—Flies.

Lecturers, programs, press articles.

VERMONT.

State Board of Health, Burlington.

Literature suitable for parents, teachers, and others.

Lantern slides on clean milk, oral hygiene, communicable diseases.

Motion-picture films on tuberculosis, clean milk, flies, toothache.

Four lecturers, press articles.

VIRGINIA.

State Board of Health, Richmond.

Pamphlet.—The Mother and Child. Reprints of health bulletins.—The Slaughter of the Innocents. Why a Physician Should Be Employed in Childbirth; several bulletin reprints on birth registration.

Exhibit on infant welfare, numerous charts.

Five hundred lantern slides.

One motion-picture film.—The Fly.

Lecturers, programs, press articles.

University of Virginia, Bureau of Extension, University.

Lecturers, programs, press articles.

Virginia Agricultural College and Polytechnic Institute, Extension Department, Blacksburg.

Distributes publications of United States Government.
Programs.

WASHINGTON.

State Board of Health, Seattle.

The Babies Bulletin. Leaflet on children's diseases.
Set of handmade cards helpful in preparing local exhibits.
Lantern slides.

State College of Washington, Department of Extension, Pullman.

Circular.—Better Babies, containing suggestions upon the organization of a campaign.

Charts on milk, etc.

Twelve lecturers. Traveling expenses and entertainment to be paid locally.
Programs, press articles.

University of Washington, Department of Home Economics, Seattle.

Bulletin on infant feeding and care.

Lecturers, press articles.

WEST VIRGINIA.

State Board of Health, Charleston.

Exhibit, 25 panels.

One hundred and fifty lantern slides, 12 on child hygiene.

Two lecturers, programs, press articles.

West Virginia University, Extension Service, Department of Home Economics,
Morgantown.

Lecturers, press articles.

WISCONSIN.

State Board of Health, Madison.

Pamphlet.—Save Your Baby. Other public-health literature. Statistical summaries.

One set wall charts, placards, photographs.

Eleven lecturers, press articles.

University of Wisconsin, University Extension Division, Department of General Information and Welfare, Madison.

Package libraries on child-welfare topics. Special bulletin on baby-week campaigns in preparation.

Twenty-five wall charts, 34 by 44 inches.

Two hundred and ten lantern slides on infant welfare, the fly and disease, clean milk, home and community sanitation.

Three motion-picture films.—Public and Private Care of Infants, The Street Beautiful, The Man Who Learned.

Lecturers, traveling expenses to be met locally.

Programs, press articles.

WYOMING.

State Board of Health, Cheyenne.

Secretary State board of health will assist personally in any way which is practicable.

University of Wyoming, Department of Home Economics, Laramie.

Programs.

RECORDS OF CHILDREN'S HEALTH CONFERENCE.

The record blank used by the Children's Health Conference conducted by the Children's Bureau in the Panama-Pacific Exposition is not a score card, with grades on a percentage basis, but a much simpler statement, being intended not to grade children for purposes of comparison but to be of service to the individual child. Measurements are placed where indicated; a check is placed to indicate a defect, opposite skin, bones, nutrition, or any of the items in this column. The summary is used for suggestions to the parent for the improvement of the child.

The record below is checked to indicate a typical case of adenoids:

.....	1. Male; Female	×	12. General nutrition: <i>Poor.</i>	.....
.....	2. Age: <i>6 years.</i>			.....
.....	3. Weight at birth: <i>8½ pounds.</i>	×	13. Fat: <i>Deficient.</i>	.....
.....	4. How long breast-fed exclu- sively: <i>6 weeks.</i>	×	14. Bones: <i>Not well formed.</i>	.....
.....	5. Age when weaned: <i>3 months.</i>		15. Muscles: <i>Soft.</i>	.....
.....	6. Why weaned: <i>No milk.</i>		16. Skin.....	.....
.....	7. What foods:		17. Hair.....	.....
.....	<i>Mod. cows' milk.</i>		18. Eyes.....	.....
.....	8. Previous illnesses (with age):	×	19. Ears.....	.....
×	Whooping cough.....		20. Nose: <i>Poorly developed.</i>	.....
×	Measles.....		21. Mouth.....	.....
.....	Respiratory diseases.....		22. Teeth.....	.....
.....	.....	×	23. Tonsils.....	.....
.....	Digestive diseases.....		24. Adenoids: <i>Present.</i>	.....
.....	.....		25. Glands.....	.....
.....	Other diseases.....		26. Heart.....	.....
.....	9. Weight: <i>39 pounds 10 ounces.</i>		27. Lungs.....	.....
.....	10. Height: <i>46.5 inches.</i>		28. Liver.....	.....
.....	11. Dimensions of head: <i>20.6.</i>		29. Spleen.....	.....
.....	Chest: <i>21.1.</i> Abdomen: <i>21.</i>		30. Ext. genitals.....	.....

The second sheet of the record is left blank for a summary which forms a written résumé of the more detailed advice given by word of mouth. The following selected summaries will give a suggestion of the type of children coming to the conference and the simple language in which advice is given. All technical terms are avoided in order to bring the suggestions within range of the understanding of a mother of average intelligence.

1. (Summary of above record.) This child has thin, pinched nostrils and contracted chest, due, probably, to presence of adenoids, which make it impossible for him to breathe properly. He is over height but under weight, and is not as well developed as a child of his age ought to be, because he can not get into his lungs enough oxygen to make good blood.

This may retard his mental development, making it hard for him to keep up with his school work.

His adenoids ought to be removed and he be kept out of doors day and night, if possible. Give simple, nourishing food as per accompanying dietary.

Don't send him to school this year. Build him up first.

2. This little girl is a credit to an intelligent mother and shows the advantages of breast feeding. She is well developed, in good proportions, and seems in fine condition.

Keep her so by an out-of-door life, regular habits, simple, wholesome food. No eating between meals, no late hours nor motion-picture shows, no crowding in school work.

Her teeth need her constant care and the oversight of a dentist. Decaying teeth mean decomposing food and indigestion.

3. This baby is thin and poorly nourished. He shows that he is not getting the right kind of food. Don't waste your time and his strength experimenting. Take him to a good children's specialist and follow his directions.

He is also overclothed. The band is no longer necessary; it is full of wrinkles and very uncomfortable. Pin his shirt to diaper; also his stockings, which should be long enough to cover entire leg. He may need the short sack night and morning, but don't let his body get wet with perspiration, as it makes him susceptible to colds.

Change all clothing at night and air thoroughly. He ought to sleep only in shirt, diaper, and gown (flannelette in winter and muslin in summer). If he can sleep in a protected corner of the porch he will become less susceptible to colds. In that case make sleeping bags by accompanying pattern, only drawing in sleeves with draw string in winter to keep his hands warm.

4. This is a tiny baby and needs breast milk. Try to get your own health in better condition so that your milk will not give out. Drink milk and cocoa instead of tea and coffee, eat only simple, nourishing food, have a nap on the porch every day while the baby is asleep, and make up your mind to nurse him six months anyway. You can if you will.

Four-hour intervals will be better both for your baby and yourself.

Your doctor will help you when he sees that neither of you is in good condition.

5. James is a big, well-built boy, has good color, and seems in fine condition, except for his knees, which are too prominent, and his ankles, which are big and bulging on the inner side. He may have walked before his ankles were strong enough to bear his weight, or his food may not have contained enough bone-producing elements.

He needs careful feeding and special care to prevent a permanent malformation of the ankle and a flattened arch of the foot. Would suggest the advice of a good orthopedist in selection of his shoes and to give him any possible preventive care.

6. Abram is suffering from faulty feeding. His bow legs and roughened, flaring ribs show that his bones are not developing well, and his teeth are slow in coming, because he needs a food with more bone-producing material. Cows' milk is more like mother's milk than the manufactured food you are using. He needs a little orange juice every day. Take him to a milk station, and they will help you secure the best possible food for your baby.

7. Baby Blank seems to be a happy, well-nourished baby. She weighs more than the average child of her age, but has rather more fat than muscle. Her abdominal measurement is greater in proportion to her chest and head than is considered normal. This is probably due to distention of the intestines.

Cream of wheat, bread, and potatoes are more starch than she needs. Don't give potato under 14 to 16 months. Try strained oatmeal, cooked slowly for two hours, instead of cream of wheat, for her constipation. Give also pulp of stewed apples, peaches, or prunes every day in addition to the orange juice. A tablespoonful of beef juice squeezed from a bit of lightly broiled round steak is better for a child of her age than so much starchy food.

Teach her habits of regularity in order to overcome her constipation.

PLAYS FOR CHILDREN.

A large number of these plays have been published in leaflet form by the National Association for the Study and Prevention of Tuberculosis, 105 East Twenty-second Street, New York, and may be purchased from that association.

Plays on baby welfare.

The Better Way, by Lennie B. Arthur and Helen V. B. Elliott. Published in *The Journal of the Outdoor Life*, July, 1916. Copies of this number can be purchased from the magazine, 289 Fourth Avenue, New York City. Short two-act play; 12 characters; everyday clothes and simple stage setting. A visiting nurse shows the family of a working man how to care for a baby and helps them to solve the problems of ill health, drunkenness, and unemployment.

The Theft of Thistledown and The Narrow Door, by G. W. P. Baird, written for the Pittsburgh Baby Week of 1915. Published by the National Association for the Study and Prevention of Tuberculosis. The plays may be produced if the author is notified in advance and is sent a copy of the program.

Two one-act plays. The first has 17 characters and simple costuming and stage setting. A kind but mischievous pixie steals an earth baby and carries it to the court of the fairy queen, where he describes the horrors of the tenement in which he found it. As punishment he is condemned to live as an earth baby until mortals learn how to treat their children properly.

The second play has 20 or more characters and simple costuming and stage setting. It is an allegory in which Life and Health sit spinning while from among the children playing some are summoned through the narrow door guarded by Death.

Both plays close with appeals to the audience to see that children are properly cared for.

The Passing of the Littlest Pageant. A fantasy by Elise Williamson Phifer. Published by the National Association for the Study and Prevention of Tuberculosis.

A short one-act allegorical play. Eleven principal characters and a large number of less important characters. Fairy costumes and simple stage setting necessary. The blind Public is shown the passage of the Littlest Pageant, the passage from fairyland to earth of a mortal baby. Mother Nature and the Dawn of Light take away the Public's bandage and he sees what must be done to keep the baby safe and well.

Well Babies, by Anna M. Lütkenhaus. Published in *Plays for School Children*, edited by Anna M. Lütkenhaus, The Century Co., New York, 1915.

Short one-act play; 15 or more characters; everyday clothes and simple stage setting. Members of a Little Mothers' League tell of their work.

Playing Visit, by Constance P. Wardle. Written for Baby Week in Slatersville, R. I., 1916. Published by the National Association for the Study and Prevention of Tuberculosis.

Short one-act play; three characters; everyday clothes and simple stage setting. Two little mothers play with their dolls, one giving proper and the other improper care, reflecting, according to an onlooker, what their mothers do with the babies at home.

Good News from Babyland, by Alberta Walker and Bernice Randall. Written for Baby Week in Washington, D. C., 1916. Published by the National Association for the Study and Prevention of Tuberculosis.

Short one-act allegory; 15 to 40 characters; everyday clothes and stage setting. Mother Dear and a troop of Better Babies explain to the bewildered Citizens of Our City what is needed to make Poor Little Things happy and healthy.

Don't Care, by Mary Walseman. Published in *New York City Baby Week Manual*, 1916. (See p. 77.)

Short one-act play in three parts; 10 characters; everyday clothes and simple costuming and stage setting. Eight health fairies come to the tenement home of Mrs. Didn't Know and her daughter, Don't Care, and show them how to care for the baby.

Plays on health, prevention of tuberculosis, medical inspection in schools, visiting nurses, etc.

David and the Good Health Elves, by Maynard Downes. Written for the Wisconsin Anti-Tuberculosis Association and dramatized by Eva Showers and Anna Costello for Baby Week in Milwaukee, Wis., 1916. Published by the National Association for the Study and Prevention of Tuberculosis. Wisconsin Anti-Tuberculosis Association must be notified if play is produced.

Short one-act play; 25 to 30 characters; simple costuming and everyday stage setting. The Good Health Elves come to David in his dream and tell him how to live in order to grow up strong and well.

Miss Fresh Air, Visiting Nurse, by Cora M. Holland and Hilda W. Smith. Published by the National Association for the Study and Prevention of Tuberculosis.

One-act play; 12 characters; simple costuming and stage setting. Mary and her mother are shown by Dr. Sunshine and Miss Fresh Air how they can drive out germs and sickness.

Five playlets by Hester Donaldson Jenkins. Copies can be purchased from Bureau of Charities, Brooklyn, N. Y. Titles of plays: Mother Goose Up-To-Date, Judith and Ariel, Our Friends the Foods, In a Tenement, Killing Giants.

Short plays of from one to three acts each; from 8 to 19 characters. The first three, dealing with health, fresh air, and foods, respectively, require the costuming appropriate for Mother Goose characters and allegorical figures of germs, foods, etc. The last two plays are on the subjects of tenements and juvenile courts, respectively; these require everyday costuming and stage setting.

The New Child, by Hester Donaldson Jenkins. Published by the National Association for the Study and Prevention of Tuberculosis.

One-act play; 10 characters; simple costuming and stage setting. A new child, Katie, comes to a tuberculosis sanatorium and is at first homesick and unhappy but is reassured by the joy of the other children in the outdoor life.

Judith and Ariel, by Hester Donaldson Jenkins. Published by the National Association for the Study and Prevention of Tuberculosis.

One-act play; 15 characters; simple costumes and stage setting. Germs of tuberculosis, helped by the imps of headache, cold, and weariness attack poor Judith. A Boy Scout, a Camp Fire Girl, and a nurse let in Ariel and her good fairies and brownies and drive the germs and imps away.

In the Forest of Arden, by Hester Donaldson Jenkins. Published in The Journal of the Outdoor Life, October, 1916. Copies of this number may be purchased from the magazine, 289 Fourth Avenue, New York City.

"Shakespeare adapted to a health playlet." suitable for acting by older children; two-act play; 15 principal characters and a large number of others; simple costuming and stage setting.

A Pageant of Average Town, by Nan Oppenlander. Published by the National Association for the Study and Prevention of Tuberculosis.

One-act play; 20 to 40 or more characters; simple costuming. The children, encouraged by Play, Wake-up, and Clean-up, stir sleepy Average Town to get rid of some of the bad fairies that infest it.

The Imps and the Children, by Mary Swain Routzahn and Hilda Smith. Published by the National Association for the Study and Prevention of Tuberculosis.

Short play in three scenes; 23 characters; everyday clothes and stage setting. Eight imps represent the ills which can be prevented by medical inspection of school children. A group of parents beg the school board to protect their children from the imps, who are finally driven away.

Health and His Enemies, by Dr. Murray Stone. Published by the National Association for the Study and Prevention of Tuberculosis.

Play in one scene; 7 characters; simple costuming and stage setting. The fairies of fresh air and sunshine conquer the imps of darkness, foul air, and germs in the home of Mr. and Mrs. Health.

The Friends of Health, by Elizabeth Sumner. Published by the National Association for the Study and Prevention of Tuberculosis.

Short play in one act with prologue; large number of characters; simple costuming. The play teaches how to prevent tuberculosis.

Wee Davie, by Claude Merton Wise. Published by the National Association for the Study and Prevention of Tuberculosis.

Three scenes; 6 characters; everyday costuming and stage setting. Suitable for acting by older children. Little David has tuberculosis. His mother and his friends are hoping that an operation at the new hospital will cure him, but they find that this help comes too late.

EXAMPLES OF NEWSPAPER ARTICLES ON BABY WEEK.

New York City better-baby week of 1914.

THIS IS OUTING DAY FOR MOTHERS AND BABIES OF THE CITY—BABY WEEK ENDS OFFICIALLY TO-DAY, BUT THE GOOD THAT HAS BEEN DONE IS EXPECTED TO LAST FOR MANY WEEKS—A SPONTANEOUS INTEREST AND DESIRE TO HELP THINGS ALONG HAS BEEN SHOWN BY HUNDREDS OF PERSONS.

This is the last day of baby week, but it is not the last day of the importance of the baby. Baby week has done to New York's attitude toward babies what a large, active firecracker placed under the chair of a dozing grandfather might be expected to do. Not that New York has not been alive right along to the rights of the baby, but the poignancy of the realization has heretofore been centered among certain organizations and individuals. Baby week has given every individual in New York a baby consciousness that is not likely to slumber again in a hurry.

This last day is outing day for mothers and children, and pretty nearly every steamship company in the city volunteered craft which will steam over river, bay, and ocean all day long with burdens of babies.

This afternoon at 3 o'clock Mayor Mitchel is to receive the better-babies committee at the city hall, and will tender them the thanks of the city for the work accomplished during baby week.

No request for money has been made during the entire week of the baby campaign, but members of the committee say that a little money has come in, nevertheless, and, better than money, a spontaneous interest and desire to help things along has been shown by hundreds of people. The telephone in the better babies' office in the Municipal Building has been busied all week by men and women who wanted to know "How can I help?"

Now that New York has awakened to a realization of its babies there are many plans on foot for additional baby work. It is hoped that the city will appropriate needed money for activities which have heretofore been held up for lack of funds. Only 56 milk stations are maintained by the health board, and a survey of the birth and death rate, block by block, shows that at least 75 are needed. Workers among the mothers of children have found that many babies die because of ignorance of the mother in regard to proper care of herself, and nurses regard the prenatal work as one of the strongest and most necessary factors in a better baby campaign. There are at present, however, only 6 nurses doing the prenatal work; 40, according to health board workers, would be none too many.

We want every mother in New York City to feel that she can come to the health board for help just as freely as her children go to the New York City better baby week.

To-day is Little Mothers' day, and in every school in the city the mayor's proclamation to the school children will be read and the kindergarten and first-grade classes will take the pledge to the baby:

I pledge to be a baby's friend
And everybody tell;
Clean air, clean clothing, and clean food
He needs to keep him well.

It is a particularly proud day, too, for the Little Mothers, for they are to have special exercises in a score or more of public schools. Of course you know who the Little Mothers are. At least you would if you had ever tried walking down the street with your baby dressed all wrong or if you had carelessly let him have a lollipop to suck, or perhaps a baby pacifier. I guarantee that you would not go 5 steps before a little fury would stand in your path and with blazing eyes and imperious mien demand that you take off those tight wrappings or throw away that pacifier.

Special lectures are given each year near the close of the school to these Little Mothers by board of health physicians, who tell them just how to dress the baby, how to bathe baby, how to feed him, and all the many other "hows" which mean a better baby.

An article sent out by the Department of Health of the State of New Jersey.

BABY WEEK AND AFTER.

The State department of health desires that the interest aroused by the celebration of baby week shall not be in vain. An article entitled "Baby week and after," in the March number of its monthly bulletin, Public Health News, which has just been issued, points out the method by which this interest may be utilized for the benefit of the community. The article reads as follows:

Now that great interest has been aroused in babies through the celebration of baby week in more than 2,000 communities throughout the country, what is to be the outcome? Unless this interest becomes crystallized into definite measures for the better care of babies, much of the value of the celebration will be lost. With lessons taught during baby week fresh in mind and while the baby is still in the lime-light, immediate steps should be taken to insure permanent results.

The first step for the protection of babies in a community is to secure accurate knowledge of the present situation. The inquiry to gain this knowledge should include the number of babies born each year, the number dying prematurely, the causes of death, the living conditions of the people, and other factors that contribute toward causing death or the impairment of health in those that survive. The subjects of inquiry should also include the facilities for remedying these conditions, such as the number of visiting nurses to be employed, consultation stations and their location, the milk supply, and other agencies or factors that affect infant health and welfare.

The best results may be expected to follow where the week's campaign has led to the formation of a committee to take stock of the

community's equipment for the conservation of infant life and to determine the additional equipment necessary to fulfill the community's obligation to its helpless infants. A community has a responsibility to prevent disease, defectiveness, and deformity, as well as death among its babies.

A committee to conduct this study should not be so large as to be unwieldy, yet it should be large enough to represent the various vital interests of the community. The board of health should be represented, because it is the power charged with the protection of the people's health—the health of infants as well as of adults. The board of education should be represented, because it is particularly charged by the laws of New Jersey with the protection of the health of school children, and no program of infant conservation is complete unless it includes or is coordinated with the conservation of older children. The chamber of commerce or board of trade should be represented, because the conservation of infant and child life is of great economic significance. The philanthropic organizations should be represented, because through them are expressed the higher and more benevolent impulses and aspirations of the community. The women's organizations should be represented, because the care of babies is largely a woman's problem.

A committee thus constituted will command the respect and confidence of the people and, if its investigations and deliberations are given wide and extended publicity, its recommendations will most surely be adopted as a community program sooner or later. Such a committee, if persistent and insistent in its work, can put squarely up to the municipality the responsibility for discharging its obligations toward the people in the care of infants in such a way that there can be no side-stepping or dodging the proposition.

Under the stress of war, facing the necessity of conserving infant life to make up for a lower birth rate and to replenish the waste of battle, the European Governments are now taking active measures for the protection of infants and children. It is the part of wisdom to give heed to vital questions before stern necessities force them upon public attention. In America there should be no waiting for war to devastate the land before adequate measures are adopted for the conservation of infant and child life. If such a peaceful campaign as the baby-week celebration leads to the development throughout the country of the kind of care and nurture a community should give to its children, this may be taken as a measure of the strength of the American Nation and as evidence of the permanence of American institutions.

MESSAGE TO FATHERS.

Letter adapted from message sent out during Pittsburgh's first baby week.

Tradition has in the past left all the care of the baby to the mother. The conditions of our present-day society require that, in addition to providing food, shelter, and other material things, the father must share with the mother the responsibility for the health of his baby.

The following are some of the things that he should understand or do:

He should understand the importance of prospective mothers having good care and advice at as early a period as possible so as to insure the health of the mother and protect the coming baby.

He should see that the mother has adequate care during and after the birth of the baby, so that the mother's health may be continued or restored as quickly as possible, both for her own sake and that she may be able to give proper care to the baby.

He should know the importance of the mother nursing her baby. Breast-fed babies have a much greater chance of living and becoming strong, healthy children than have bottle-fed babies. This is so important that anything that would alter or lessen the mother's milk supply, such as overwork, excitement, shock, or worry, should be avoided.

If, after every effort is made, the mother's milk supply is not adequate, the father should know that clean, fresh cows' milk is the best substitute, and should see that the baby gets such milk and that the mother has the advice of the doctor on its preparation.

He should know that nearly one-third of all infant deaths occur as the result of digestive disturbance brought on chiefly by faulty feeding.

He should know that soothing sirups are dangerous, that pacifiers are both needless and injurious, that the baby needs rest and regular hours of sleeping, and should not be kept up late nor handled too much.

He should know the importance of good surroundings to the baby. The baby needs fresh air and sunlight as much as any plant. Like a plant, the baby will droop and die if kept in a dark, close room, deprived of nature's best health tonics—fresh air and sunlight.

Cleanliness in and about the home is even more important to the baby than to the adult. Baby can not protect itself against dust, dirt, and flies. Flies bred in the open garbage can or in the rubbish heap in the yard may carry germs to the baby's mouth or milk and cause diarrhea or other diseases.

The father should not fail to have his baby's birth registered at the health department. A certificate of birth will be necessary for school attendance, going to work, inheritance, and citizenship.

Lastly, every father should know of and take an active part in promoting conditions in our city which will give every baby a better chance. Some of these things are better industrial conditions, better housing, improved municipal sanitation, improved milk supply, milk stations, and visiting nurses, settlements, nurseries, and other agencies for the protection and conservation of infant life. He should know what his own health department is doing.

Message to fathers, published by Rhode Island State Board of Health for baby week, 1916.

As to that baby of yours. Whatever you may think about it, it is a good baby if you will give it a chance to be. It is *your* baby, and you want it to be strong and healthy. If it is cross or cries and it is sickly, there is a reason for it, and it is a part of your duty to

see why. Don't leave it all to the little wife. It is "up to you" to see that the kiddy gets all that nature intended for it, just enough and no more.

First, *good food*. What is that? Why, the mother's own milk that belongs to it—the breast milk. But for her to give good milk to the baby she must be kept strong with proper food for herself, not worked so hard that she is tired all the time. Remember she has the care of the house, the laundry, the sewing, to say nothing of the baby, and he has to be fed pretty often, and it keeps her at home a good deal. Yes; and she has to see that your meals are properly prepared, and ready on time. Perhaps she does get tired sometimes, and fretty. Perhaps you would. All day you have had a change from the monotony of the house, even if you did work hard. If the wife is tired and cross, give her half a chance to get rested and happy. *Help a bit*. Forget your own grouch; leave your worries at the shop or office. Just notice that if she is cheerful it helps you a lot. If you try to be cheerful wouldn't it help her? Yes; and that means the baby. Excessive excitement, shock, or worry worries the milk, and that worries the child; and then it cries, you lose your sleep, and that worries you.

If the mother has not enough of her own milk to keep the child well and have it gain a little in weight each week, see that it gets *the cleanest milk that you can find*. You will not usually get such milk in stores. If you want to get good milk, ask the milk inspector in the city or town or ask the health officer or the president of the town council. Help the wife to keep the milk bottles clean, also the bottles, pitchers, or cans that you buy the milk in, and also the bottles and rubber nipples that the baby uses. A little sour milk will spoil fresh milk. Find a cool, clean place to keep the milk and make a little refrigerator out of a grocery box, a tin pail, and some sawdust. The board of health will tell you how. A small piece of ice will keep the milk sweet and perhaps save the baby's life in the summer. You don't want the baby to have bowel trouble, colic, or pains, and to be crying all the time because you give it dirty or sour milk. How would you like it yourself? Remember that milk is the only food, except some of the prepared baby foods ordered by the doctor, that the little chap is allowed to eat.

Remember that nature does not give the baby any teeth at first. Its stomach can not digest or take care of solid food. When the body is ready to use solid food nature will supply the teeth; so don't you feed it on sausage, cabbage, candy, and everything or anything that it sees on the table. If you do, it will cost you money for the doctor and perhaps the baby's life.

Do you know that nearly one-third of infant deaths occur because the baby is not properly fed? In Rhode Island one out of every eight babies born dies before it is 1 year old. Why? Some die because the mother was not strong before the baby was born, was overworked perhaps, did not have sufficient proper food and plenty of change and fresh air, but most of the babies die so young because they are not properly fed. Many pine away for the want of sunlight and fresh air. Did you ever see a young plant grow in a dark room and without plenty of air? Remember that babies are tender, and it takes very little to change them for better or for worse. Some pine away and die because they are given soothing sirups to keep them from

crying. If the baby cries continually, find out the reason. See the family doctor or go to the clinic at the hospital between 9 and 10 o'clock. Don't jounce him up and down like a milk churn, and don't pull him out of a sound sleep to show the callers what a likely chap he is. If he does not get sleep enough, he may not continue to look so much like father's family.

Keep the flies away from him and from his food. They have just come from the garbage heap and may give the baby diarrhea and bowel trouble. Mosquito netting does not cost much. It keeps the mosquitoes away, too, and gives the baby a chance to sleep.

Don't let him crawl around on the dirty floor and beat up the carpet and fill his throat full of dust which you have brought in from the street on your shoes.

There is one thing you can do all by yourself. Make it your duty right away after the baby has arrived to see that the birth has been reported by the doctor to the city registrar or town clerk. Why? Because you or the child may have to prove his age in order to get work when he is 14 years of age; or it may be necessary to prove his age to vote, or to get married, or to show that he is a citizen of the United States and can not be drafted into a foreign army; or there may be money or property coming to him. "Nothing doing." Can not prove that such a person was ever born. Father and mother and relatives are all gone, *but* the record will show *who* was born and when and where. Go yourself to the record office and see that the doctor has reported the birth. Although the law requires this, yet many doctors forget to do it. Is not the little chap worth that small trouble? Yes; there are a lot of don'ts, but give the baby a chance before it is born, and then a "square deal" afterwards, good food, plenty of sleep, and plenty of air.

"SAVE THE KIDDIES."

Think it over, then do it.

STORIES PUBLISHED IN A BABY-WEEK LEAFLET AT GRAND RAPIDS, MICH.

A Moribund Baby.

It was a shocking little skeleton of a body that Mrs. Brown undressed and laid across her knees at the city clinic. Too weak to hold up its head and too lifeless to notice anything or anybody, its body lay there limp, every tiny bone pitifully distinct, the little legs bowed and curved. Mrs. Brown seemed pathetically hopeless herself, but she answered straightforwardly all the questions put to her by the businesslike but kindly nurse. Yes; she had weaned him a few weeks after birth. That was a dangerous thing to do! Why, she knew lots of girls who brought their babies up on bottles; and it was such a nuisance to nurse him. No; she hadn't given him modified cows' milk; he seemed to like condensed milk better, so she let him have that. She wished she'd known cows' milk was better for him; but no one told her, and how was she to know? When he began to have solid food he sat at the family table. Oh, most anything. Coffee, sometimes, and a little tea, fried eggs, ham—anything he liked. No; he wasn't outdoors much, hardly at all; in fact, just when she went visiting twice a week or so. My, no! They didn't have a separate

bed for him; he slept with them, and her husband would have 40 fits if she opened the window at night.

A commonplace recital—how commonplace only nurses know. How Mrs. Brown's face lighted up when told that with careful nursing there was a chance for her baby, and how eagerly she promised to follow faithfully each one of the simple directions which the nurse gave her. For her ignorance Mrs. Brown had almost paid, and many mothers do pay, with the baby's life. But was she entirely to blame?

Prepared for Business, not for Motherhood.

All the girls in the building took an interest in Anna S.'s marriage. Anna had been an office girl for six years, and besides being valued by her employers for her intelligence and efficiency was a general favorite with the other girls. So, when Romance and a Fairy Prince came to Anna the girls were ungrudgingly glad that the Prince held a good business position, and that Anna could have many little luxuries that she had never allowed herself before. Their interest in her simple trousseau was unbounded and kindly, and when they finally waved her good-by after the ceremony at her aunt's house no one of them, least of all Anna herself, suspected that she was lacking in the most essential preparation of all.

The prospect of a baby brought only happiness to Anna, and she set about making the little outfit with all a young mother's delight. The materials she purchased were dainty and expensive, but not one practical or useful article was to be found when the layette was finished. The baby came, fat and well nourished. She tried nursing him, but it was painful, and, ignorant of the proper care of herself and of the danger to her baby, she weaned him after a couple of weeks. The new food, adopted at the suggestion of interested neighbors, did not agree with the baby; she changed to another, then another, and in desperation to still another. Gradually the baby lost weight, grew paler and weaker, and finally fell dangerously ill. A physician was called, and when instead of medicine he prescribed only a wet nurse, Anna's one cry was: "Nothing would have made me wean my baby if I'd known how dangerous it was. Why was I never taught?" Why wasn't she?

Criminal Ignorance.

"No wonder your baby doesn't retain her food, or sleep, or gain in weight; you wouldn't either if you were bounced and jiggled as you bounce and jiggle her." And the nurse proceeded to instruct Mrs. T—— in the simple fact that babies, even more than kittens and puppies, must not be handled but allowed to sleep and eat with perfect regularity. But nobody had told Mrs. T—— this, and in hope of making her "smart" the baby was played with and talked to continually and wakened and shown to admiring relatives and friends until her delicate nerves were all aquiver and she became a very sick baby indeed. There are thousands of young women in the country who are just like Mrs. T——, and for the sake of themselves, their children, the citizens of to-morrow, and society, they must be educated in motherhood before motherhood catches them unawares and unprepared.

**A LIST OF CRADLE SONGS, ETC., PUBLISHED BY THE
NEW YORK CITY BABY-WEEK COMMITTEE.**

SONGS FOR HIGH OR LOW VOICE.

Cradle song, Rockaby Baby	Norris.
Sleep, Little Baby of Mine	Dennes.
Mighty Lak a Rose	Nevin.
Baby's Boat's the Silver Moon	Gaynor.
His Lullaby	Carrie Jacobs Bond.
"Des' Hol' My Hands To-night"	Carrie Jacobs Bond.
Cradle song	Kate Vannah.
Sing, Smile, Slumber	Gounod.
Go to Sleep	Fisher.
Cradle song	Franz Ries.
Mammy's Song	Sydney Homer.
Curly Headed Baby	Hudson.
Cradle song	Schubert.
Sweet and Low	Barnby.
Hindu lullaby	Harriet Ware.

PIANO SOLOS.

Brahms Slumber Song, opus 117.
Chopin Slumber Song.

VIOLIN SELECTIONS.

Berceuse.....Jocelyn.
Slumber Song.....Arranged by Kreisler.

TWO OPERETTAS.

Boy Blue.
Whole Year Round.

SONG COLLECTION ABOUT CHILDREN.

Cradle Song of Many Nations.....Katharine Wallace Davis.
Kittie Cheatham—Her Book.
Cradle songs—18 vocal and 11 piano.....John Church Co.
Stevenson, Child Garden of Verses.....Music by Nevin (Scribner's).
Songs of Childhood, Eugene Field.....Music by De Koven (Scribner's).
Kindergarten Chimes.....Kate Douglas Wiggin.
Songs of a Little Child's Day.....Eleanor Smith.
Song Echoes from Child Land (contains
two mothers' hymns).....Harriet Jenks and Mabel Rust.

CHORUSES, WOMEN'S VOICES.

Brahms Cradle Song.
Jakobowski Lullaby from Erminie.
Gaelic lullaby, Victor Harris; quartet mixed voices.
Lohr Slumber Song; mixed voices.
Sweet and Low, Barnby; mixed voices.

**NEW YORK CITY BABY WEEK. BABY SABBATH, MAY
6; BABY SUNDAY, MAY 7.**

A Prayer for the Babies.

[By Walter Rauschenbusch.]

O, God, since Thou hast laid the little children into our arms in utter helplessness, with no protection save our love, we pray that the sweet appeal of their baby hands may not be in vain. Let no innocent life in our city be quenched again in useless pain through our ignorance and sin. May we who are mothers or fathers seek eagerly to join wisdom to our love lest love itself be deadly when unguided by knowledge. Bless the doctors and nurses and all the friends of men who are giving of their skill and devotion to the care of our children. If there are any who were kissed by love in their own infancy but

who have no child to whom they may give as they have received, grant them such largeness of sympathy that they may rejoice to pay their debt in full to all children who have need of them.

Forgive us, our Father, for the heartlessness of the past. Grant us great tenderness for all babies who suffer and a growing sense of the divine mystery that is brooding in the soul of every child. Amen.

LETTER DESCRIBING ARTICLES FOR CARE AND AMUSEMENT OF YOUNG CHILDREN SHOWN IN THE BOONTON (N. J.) BABY-WEEK EXHIBIT.

My "Grandmother's Nursery" is original, and was planned for the care and instruction of my seven grandchildren from materials which come into every home daily and are usually thrown away. This nursery was exhibited during baby week at Boonton, N. J., as an incentive to the older children.

My grandchildren are from 1 to 7 years old and spend some time each year with me, so that I felt the need of occupation and instruction for them while here. The things are made from flour, sugar, salt, and feed bags, packing cases, and glass containers. All the little toilet jars and soap dish on the baby stand which holds the conveniences for daily bath are bottles with screw tops, enameled, and hand decorated. The mantel ornaments and desk fittings are tin cans, cocoa boxes, and sardine boxes enameled and decorated with hand decorations or with Greek figures cut from the magazines.

The rugs are from partially worn underwear, dyed, then braided or crocheted. The dolls are made from the tops of stockings and the tops of long kid gloves. The box of wooden sticks is made from the wooden handles given out by many stores to carry packages with; the wire has been removed and they have been dyed the primary colors and are used to teach color and to string like beads. The needle used for this and for weaving on the little frame is made from the key which comes with the sardine can.

The pictures are from the Sunday supplement and magazines and are all copies of good pictures. The tether ball and punching bag combined (this is for small people) is made from dyed canton flannel with a netted covering and tassel. The square with the Dutch figures is a table cover made from a flour bag; the figures, which are cut from blue merino and hemmed on, show some of the industries of Holland.

The little pair of curtains on the screen are made from two flour bags, with crocheted edges of the wrapping cord that comes around groceries. The little figures on them are traced with colored crayons from toy books. The little spread has the animals and children's stories done in oil crayon and pressed with a warm iron on the wrong side, which makes them indelible. It is made from sugar bags and joined with cord the same as the curtains.

The waste-paper basket is a small-size peach basket, enameled and decorated. The baby stand is a cheese box and its lid. The desk drawers are all cocoa boxes. The mattress was stuffed with the excelsior which came in the crates and boxes and the shavings from the carpentering, with a thick cotton pad on top.

Every clipping from the sewing went into the stuffing of the dolls. All ends sawed from the lumber were planed and sandpapered for building blocks. The children like my blocks best; they call them real wood.

The books are made from heavy wrapping paper, with pictures cut from the advertisements of magazines. The bedtime stories are clipped from the evening paper. The children hunt and cut out their own pictures to suit the story. The grocery order book which they use in playing store is from the pictures and labels that come on canned goods, biscuits, etc., with their market price written below. They tell me from the pictures what they have in stock. I write my order and price on a pad which they copy. In this way they learn to read writing, write, spell, make figures, and add, and learn the market price of each commodity.

I did most of this work when I had one or more of my grandchildren with me, and worked on their clothes at the same time. I am 50, keep no help, do the work for a family of three. I argue that an interested child is a busy child, and a busy child is a good child. The description of the pad on the desk is for my grandson of 7, and is decorated in this manner: Uncle Sam looking at the signers of the Declaration of Independence, a picture of the evacuation of Boston, the American eagle, the Stars and Stripes, Washington, and Grant.



**ILLUSTRATION NO. 1.—BABY WEEK WAS CELEBRATED ON
INDIAN RESERVATIONS.**

Reproduced from "Indian Babies, How to Keep them Well," published
by the Office of Indian Affairs, Department of the Interior,



ILLUSTRATION NO. 2.—"THE BABY SPECIAL" RUN BY THE CAPLEVILLE COOPERATIVE CLUB TO THE EXHIBIT AT MEMPHIS.

A practical example of cooperation between city and country.



ILLUSTRATION NO. 3.—A BABY-WEEK PARADE IN NORTH DAKOTA.

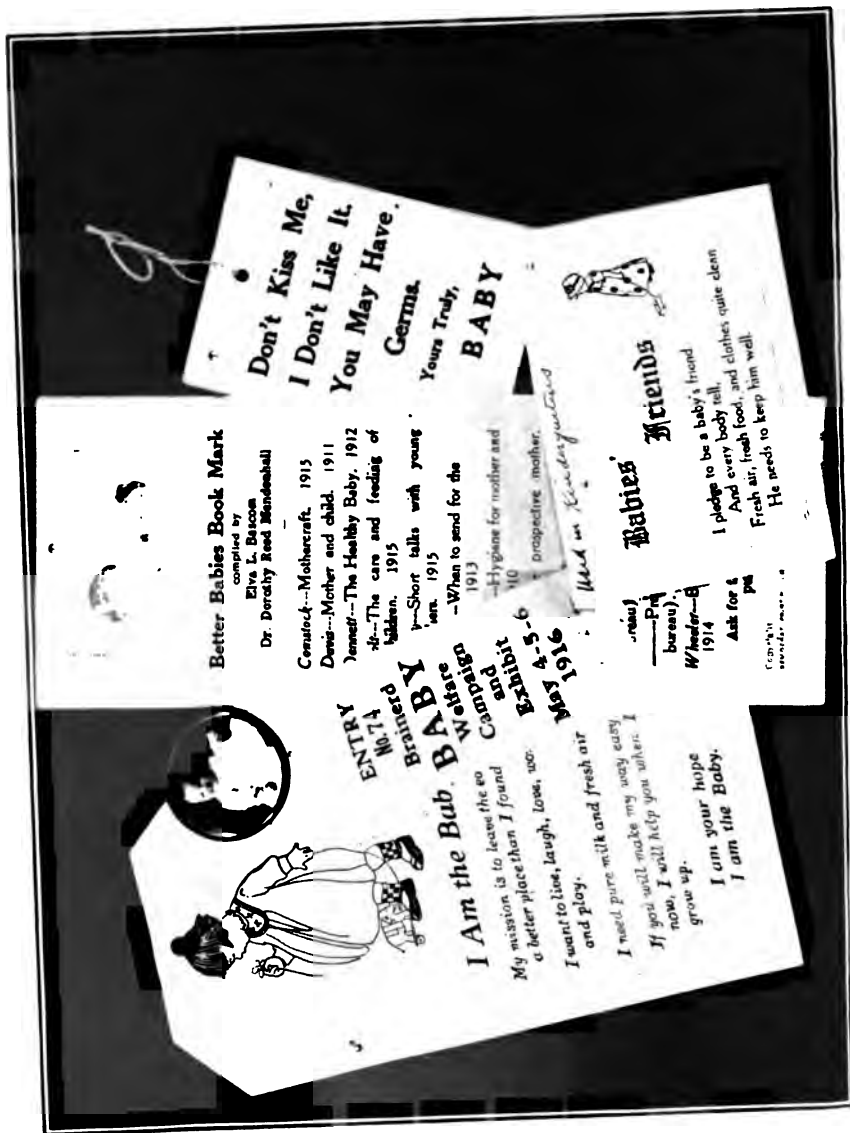


ILLUSTRATION NO. 4.—EXAMPLES OF BABY-WEEK PRINTED MATTER USED IN DIFFERENT TOWNS.

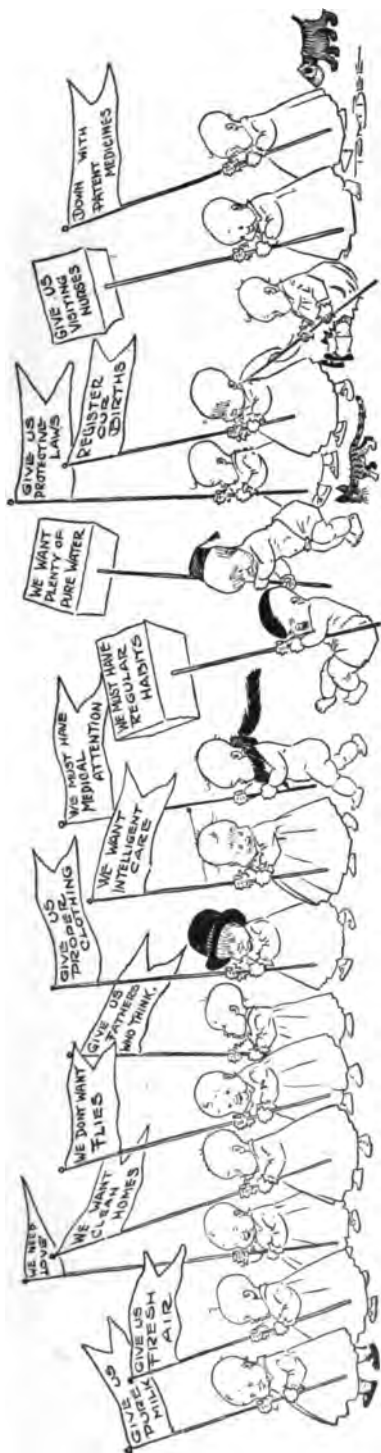


ILLUSTRATION NO. 5.—A BABY-WEEK NEWSPAPER CARTOON.

Reproduced by courtesy of Baltimore Evening Sun.

**IF GROWNUP FOLKS
WOULD ONLY THINK
HOW OFTEN
BABY
WANTS
A DRINK !**



ILLUSTRATION NO. 6.—THIS PRIZE-WINNING POSTER IN A NEWSPAPER CONTEST WAS MADE BY A SCHOOLBOY. THE PICTURE WAS CLIPPED FROM A MAGAZINE; THE GLASS, BOTTLE, AND LETTERING WERE DONE BY HAND.

Reproduced by courtesy of Baltimore Evening Sun.



ILLUSTRATION NO. 7.—ONE METHOD OF ADVERTISING BABY WEEK USED IN HELENA, ARK.



ILLUSTRATION NO. 8.—ATTRACTIVE LESSONS ON AN UNPLEASANT SUBJECT.

Designs used for posters and pasters issued by the New York Association for Improving the Condition of the Poor. Design shown at the right won first prize among public-school children of New York City.



ILLUSTRATION NO. 9.—SUGGESTION FOR A FATHERS' DAY LEAFLET.

From The Chautauquan, Valley City, N. Dak.

BUREAU OF VITAL STATISTICS

**DIVISION OF HEALTH
CITY OF CLEVELAND**

Certificate of Birth Registration



This Certifies that, a certificate of birth is on file at this
office bearing the name

Born at

Father's name

on

19

Mother's name

No. of Certificate

Signed *GE Harmon* Registrar
R. H. Bishop, Jr. D. Commissioner of Health

ILLUSTRATION NO. 10.—THIS CERTIFICATE, PRESENTED TO THE PARENTS OF EVERY NEWLY REGISTERED BABY IN CLEVELAND, STIMULATES INTEREST IN BIRTH REGISTRATION AND THE REPORTING BY PARENTS OF UNREGISTERED BABIES.

ONE YEAR OF PENNSYLVANIA'S DEATHS FROM DIARRHEA AND ENTERITIS UNDER 2 YEARS OF AGE, GROUPED BY MONTHS.

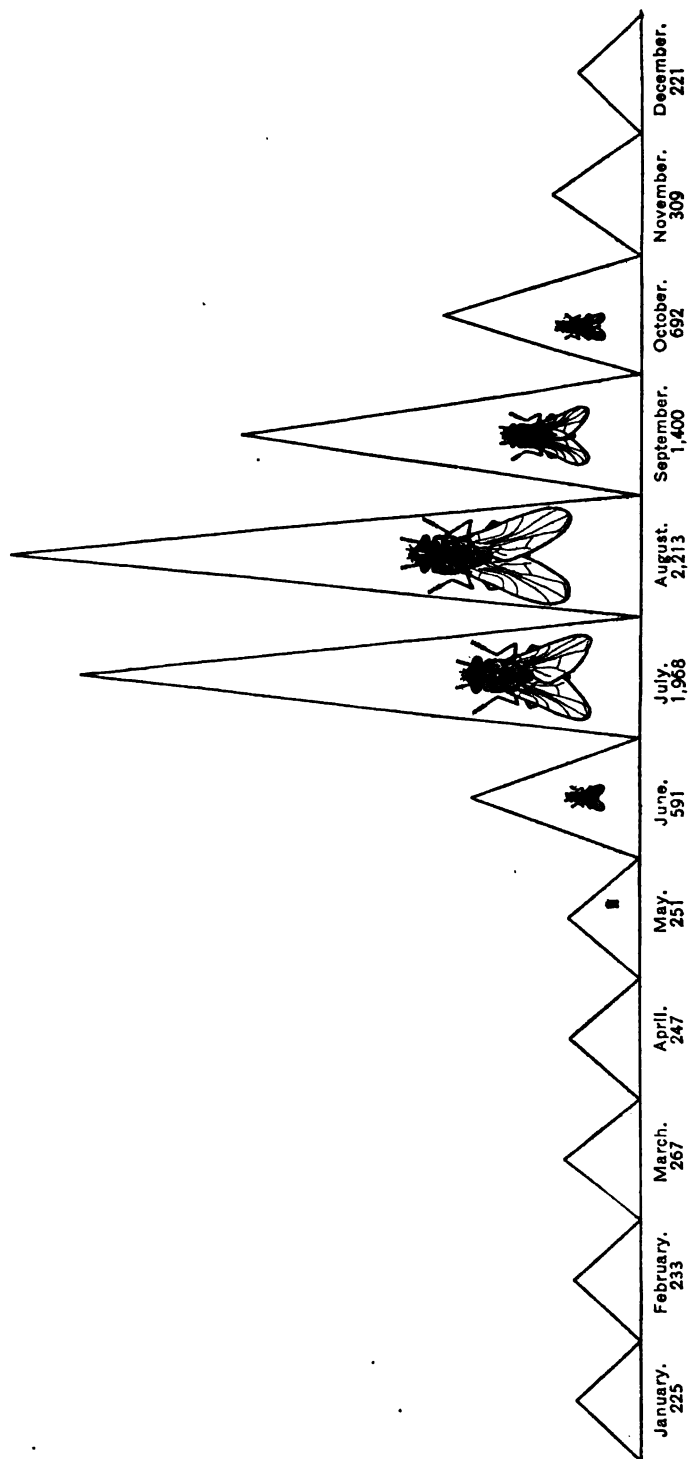


ILLUSTRATION NO. 11.—A PANEL FROM THE BLUE PRINT EXHIBIT PREPARED BY THE PENNSYLVANIA DEPARTMENT OF HEALTH.

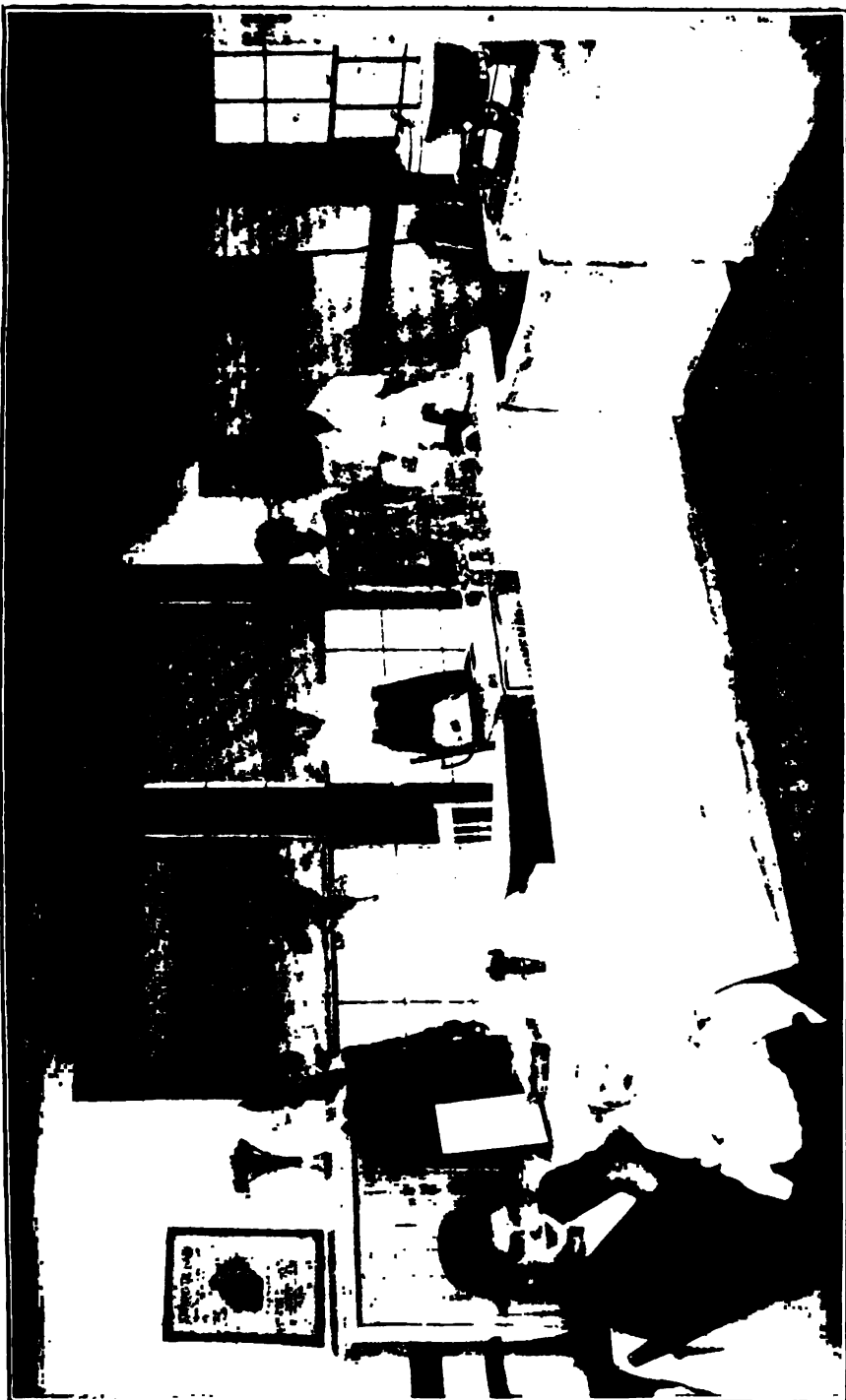


ILLUSTRATION NO. 12.—EVERYTHING PREPARED FOR A DEMONSTRATION OF BABY CARE (STAMFORD, CONN.).



ILLUSTRATION NO. 13.—WELL-ARRANGED EXHIBIT OF FOOD FOR YOUNG CHILDREN.,AT ERIE, PA.



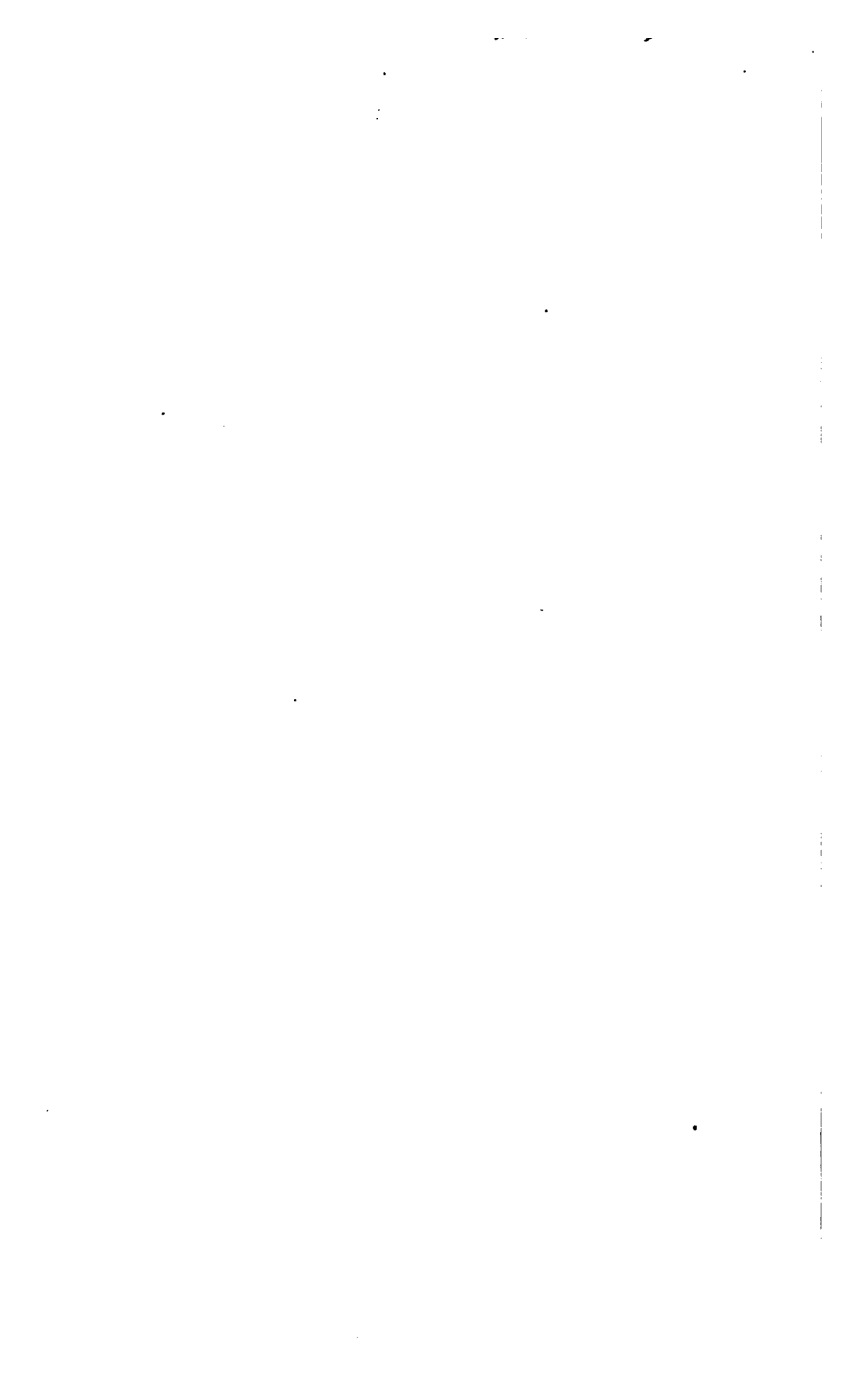
ILLUSTRATION NO. 14.—A PUBLIC-HEALTH EXHIBIT FROM LAWRENCE, MASS.



ILLUSTRATION NO 15.—CLOTHING FOR A LITTLE GIRL AT MINIMUM COST, EXHIBITED AT BOONTON, N. J.



ILLUSTRATION NO. 16.—HOMEMADE ARTICLES FOR THE CARE AND AMUSEMENT OF YOUNG CHILDREN, EXHIBITED IN BOONTON, N. J.



INDEX.

Addresses. <i>See</i> Meetings; Subjects.	Page.	Baby-clinic day. <i>See</i> Baby-health	Page.
Advertising, committee. <i>See</i> Publicity, committee on.		conference.	
dangers of promiscuous.	64	established after baby week.	66
day.	35	Baby contest, for improvement.	53, 68, 89
how to secure free.	14,	replaced by health conference.	49, 50, 87
19, 20, 25, 26, 29, 54, 56, 72		Baby day, program for.	20-21, 74
of exhibits.	14, 15, 26, 85	Baby death rates. <i>See</i> Infant mortality.	
of meetings.	45, 46, 54, 90	Baby-health conference.	11,
paid.	90	15, 16, 21, 24, 29, 48, 49-51,	
through local stores.	15, 63, 94	86-89, 94, 98, 132-133	
through milk dealers.	60	advance appointments for.	50, 51, 87
<i>See also</i> Newspapers; Publicity.		competitive.	50, 86, 88, 119
Agricultural colleges and universities,		noncompetitive.	16, 49, 50, 87, 132-133
circulars sent out by.	31, 32	organizing.	72, 86-89
cooperation of.	10, 16, 27, 30, 31	publicity about.	14, 16, 21, 75
exhibit material prepared by.	31, 82	Baby Sabbath.	24, 76, 143-144
lantern slides prepared by.	31, 121-131	<i>See also</i> Baby Sunday.	
lecturers supplied by.	121-131	Baby Sunday.	22, 24, 29, 36, 76, 109, 113, 143
material supplied by.	17, 121-131	"Baby, The"	61
programs supplied by.	31, 121-131	Baby-Week Manual, New York.	77
American, Association for Study and Prevention of Infant Mortality.	119	Baby-week, nation-wide. <i>See</i> Nation-wide baby week.	
Medical Association, baby-health conferences and.	88	Baby welfare, committee on, information.	72
cooperation of.	28	exhibit.	45-49, 81-85
material supplied by.	88, 119	information.	30, 43-45, 56, 78-80
Red Cross Town and Country Nursing Service.	96, 119	local conditions affecting.	56, 78-80
Social Hygiene Association.	120	station. <i>See</i> Infant-welfare stations.	
Appointments for baby-health conference.	50, 51, 87	Baptismal records in birth-registration survey.	42
Appropriations from public funds for		Bathing baby, demonstrations of.	47,
baby-week campaigns.	14	113, 114	
for infant-welfare work.	64,	Birth-registration, area.	109
65, 66, 96, 99		certificate of, sent to parents.	42, 78, 99
Assistance in local campaigns. <i>See</i> Campaigns (local), outside assistance for; Cooperation.		day.	42, 77, 78
Audience for lectures, etc., methods of securing.	24, 25, 38, 39, 53, 54, 89, 90	flag day and.	74, 75
non-English speaking.	23, 54	means of improving.	34,
size of.	20, 23, 26	88, 42, 64, 70, 78, 94, 98	
<i>See also</i> Meetings; Publicity.		methods of studying.	42-44, 77, 78, 98
Automobiles, use of.	20, 22, 37, 76, 77	Boards of health. <i>See</i> Departments or boards of health.	
"Babies' Friends"	62	Bookmark, better babies.	38
Babies, sick, provisions for.	80	Boy Scouts, help given by.	21, 25, 36, 37, 71
"Baby"	60	Bulletins, State health.	33, 56, 121-131
Baby-button day.	35	Bureau of Education.	16
Baby care.	21,	Bureaus of child hygiene, cooperation of.	31, 34, 99
26, 41, 46, 77, 80, 95, 96, 98, 111, 113		establishment of.	64, 70, 98, 99
<i>See also</i> Exhibits; Pamphlets.		Business men, cooperation of.	14,
		20, 23, 25, 30, 48, 54, 60, 63, 84, 94	
		leaflets to.	59
		Buttons.	28, 25, 35, 37

- | | Page. | | Page. |
|---|---------------------|--|-------------------------|
| Campaigns (local), cooperation in. | | Communities, cooperation among | 12, |
| <i>See</i> Cooperation. | | 19, 21, 49, 71 | |
| how to begin | 25, 29, 69-73 | list of, celebrating baby week | |
| number of | 11, 108 | in 1916 | 101-108 |
| obstacles overcome | 12 | total number of, in United | |
| outside assistance for | 15-17, | States | 13 |
| 24, 27-34, 48, 49, 55, | | Community, conditions, improvement | |
| 80, 82, 89-93, 117-131 | | in, as a result of baby week | 64-67, |
| reports | 10, 31, 100 | 99 | |
| time desirable for preparation | | study of | 29, |
| for | 73, 82 | 43, 44, 51, 52, 66, 78, 80, 91, 94, 99 | |
| (national), history of | 9-13 | Community, day | 35 |
| Camp Fire Girls, help given by | 16, 17, 71 | needs, study of | 29, |
| Camps for babies | 37, 76, 80 | 44, 80, 83, 91, 94, 99, 111-112 | |
| Cards, advertising | 59, 60 | Competition, better-mothers | 52-53, 89 |
| Causes of baby deaths in communi- | | county | 51 |
| ties, survey of | 78-80, 110 | essay | 40 |
| Celebrations. <i>See</i> Campaigns, local. | | poster | 40, 46, 51, 59 |
| Center for maternal and child wel- | | slogan | 30, 57 |
| fare | 70, 97, 98 | Conference. <i>See</i> Baby-health confer- | |
| Certificate of birth registration | 42, 78, 99 | ence. | |
| Chamber of commerce. <i>See</i> Men's | | Contest. <i>See</i> Baby contest; compe- | |
| organizations. | | tition. | |
| Charts. <i>See</i> Exhibits. | | Continuation schools, instruction in | |
| Child Federation, The | 85, 89, 98, 121 | infant care by | 41 |
| Child hygiene, divisions of. <i>See</i> | | Contrast exhibits | 17, 45-47, 84, 115, 116 |
| Bureaus of child hygiene. | | Contributions by cities and States | 14 |
| Children's Bureau | 9, 15, | Cooperation, advantages of | 13, |
| 16, 56, 78, 88, 91-93, | | 14, 20, 23, 25, 70, 71 | |
| 98-100, 114, 116, 118 | | in State campaigns | 27-34 |
| Children's health conference. <i>See</i> | | of boards and departments of | |
| Baby-health conference. | | health | 14, 71 |
| Children under school age, baby | | <i>See also</i> Campaigns, local, out- | |
| weeks including | 12, | side assistance for. | |
| 15-18, 20, 23, 38, 44, | | of Boy Scouts | 21, 25, 36, 37, 71 |
| 48, 49, 53, 56, 70, 84 | | of business men | 14, |
| "Child's Declaration of Rights" | 62 | 20, 23, 25, 30, 36, 48, 54, 60, 63, 84, 94 | |
| Child-welfare, exhibits. <i>See</i> Exhibits. | | of Camp Fire Girls | 16, 17, 71 |
| societies. <i>See</i> Cooperation, ad- | | of city officials | 14, |
| vantages of. | | 25, 26, 30, 36, 37, 45, 60, 75, 76, 78 | |
| Choruses | 90, 143 | of infant-welfare societies | 13, 71 |
| Churches. <i>See</i> Cooperation of relig- | | <i>See also</i> Infant-welfare socie- | |
| ious bodies. | | ties. | |
| Cities, baby-week reports from | 11, | of men's organizations | 20, 48, 71, 91 |
| 23, 25-27, 101-108 | | of merchants | 14, |
| City celebrations, centralized | 25, 26, 81 | 15, 19, 23, 24, 63, 81, 84, 94 | |
| decentralized | 23, 24, 54, 81, 91 | of motion-picture houses | 23-25, 63 |
| shared by neighboring coun- | | of newspapers. <i>See</i> Newspapers. | |
| try | 19, 23, 71, 90 | of physicians | 13, |
| <i>See also</i> Committees. | | 15, 16, 19, 20, 21, 23, | |
| City officials. <i>See</i> Cooperation of | | 26, 36, 37, 71, 88, 89 | |
| city officials. | | of playground workers | 71 |
| Clerical help, by volunteer workers | 26, 72 | of public-health nurse | 71 |
| by paid workers | 73 | <i>See also</i> Public-health nurse. | |
| Clothing, exhibit of | 15, 46, 48, 84, 114 | of religious bodies | 14, |
| Clubs, announcements of programs | | 15, 18, 19, 21, 22, 24, 25, 36, 71, 76, 90 | |
| made at | 90 | of schools | 14-17, |
| study, of infant welfare by | 91, 99 | 21, 22, 25, 31, 36, 38, 39, 43-45, | |
| of local conditions by | 43, | 49, 51, 53, 54, 71, 74, 77, 81, | |
| 44, 78, 80, 99 | | 85, 89, 92, 113-114 | |
| topics for discussion in | 18, | of settlement houses | 24, 54, 91 |
| 20, 23, 78, 91 | | of universities and agricultural | |
| <i>See also</i> Cooperation. | | colleges | 10, 16, 27, 31 |
| Committees, duties of | 15, 16, 25, 72, 73 | <i>See also</i> Campaigns, local, out- | |
| follow-up | 65, 94, 137-138 | side assistance for. | |
| list of | 25, 28, 72 | of women's organizations | 9, 13, |
| organization of | 25, 71 | 17, 19, 20, 23, 25-28, 36, 45, 58, 66, 71 | |

	Page.		Page.
Cost. <i>See</i> Expenses of local campaigns; Exhibits.		Essays by school children.....	39, 40
Council on health and public instruction. <i>See</i> American Medical Association.		Examination of children.....	18, 19, 66, 95
Counties, campaigns in.....	19-23, 65, 71	<i>See also</i> Baby-health conferences.	
County center for maternal and infant welfare.....	70, 97-98	Executive, committee.....	72
County nurse, employed as a result of baby week.....	66, 98	secretary, employment of.....	72
County school officers, cooperation of.....	71	Exhibits, articles or models.....	21,
Coupons in newspapers, appointment for health conference.....	51	26, 45-47, 49, 63, 84, 114-116, 144	
birth registration.....	42	changing.....	49
Courthouse, use of.....	20, 54	children's.....	17, 18, 46, 48, 49, 70, 84, 114
Cradle roll used as means of locating babies.....	43	clothing.....	15, 46, 48, 84, 114
Cradle songs, list of.....	143	contrast.....	17, 45-47, 84, 115, 116
Daddy's day.....	35	description of.....	33,
<i>See also</i> Father's day.		45-47, 81, 84, 114-117, 144	
Dairies, distribution of tags by.....	60	explainers.....	23, 46, 48, 54, 85
inspection of, improved.....	26,	food.....	17, 22, 47, 63, 81, 84, 94, 115
45, 64, 67, 70, 79, 94		for non-English speaking audience.....	46, 48, 54
models of.....	45	hostesses at.....	20, 26, 45, 58
Daughters of American Revolution.....	36, 66	in shop windows.....	49, 63-64, 74, 81, 94
Day (special), during baby week.....	15,	living features.....	86
24, 25, 27, 29, 35, 41, 53, 73		methods of making.....	17, 18, 33, 82-84
programs for.....	25, 26, 29, 35-43, 74-78	moved about.....	12, 19, 31, 49, 84
Death rates, infant. <i>See</i> Infant mortality.		panels for. <i>See</i> Panels.	
Demonstration day.....	29	publicity about.....	45, 54, 58, 75, 85, 90
Demonstrations, advantage of.....	84	<i>See also</i> Publicity.	
suitable.....	15,	securing material for.....	14, 24, 32, 33,
17, 21, 22, 39, 41, 45-48, 84-86		48, 49, 63, 82, 84, 94, 117-131	
Department, of Agriculture.....	10, 16, 118	sources of information about.....	85
of Interior.....	16, 16	subject matter of.....	17, 21, 26, 32, 45, 46,
Departments or boards of health, and baby week.....	14, 25, 26, 45, 60, 70	63, 69, 78, 81, 84, 85, 92, 96, 114-116	
permanent work for infant welfare.....	37, 64-66, 70, 76, 94-99	supplied by organizations and public agencies.....	118-131
<i>See also</i> Registrars of vital statistics; State health officers.		toys.....	17, 18, 46, 144
Departments (special), in newspapers.....	51, 53, 56, 93	unsupervised, to be avoided.....	63, 64, 94
Department stores, cooperation of.....	23,	where held.....	12-13, 15, 18, 23, 24,
24, 63, 81, 94		26, 36, 39, 49, 67, 74, 81	
Difficulties overcome.....	12	<i>See also</i> Demonstrations.	
Director, paid.....	72, 73	Expenses of local campaigns.....	14,
Discussions, subjects for.....	18, 20, 23, 78, 91	18, 20-22, 24, 26, 72, 73, 93	
Distribution of literature.....	12,	<i>See also</i> Exhibits.	
16, 17, 22-25, 36, 47, 55, 63, 92		Extension departments. <i>See</i> Agricultural departments and universities.	
of flags. <i>See</i> Flag, distribution.			
Divisions of child hygiene. <i>See</i> Bureau of child hygiene.		Farm women, meetings of.....	14, 21
Doctors. <i>See</i> Cooperation of physicians.		Fathers, day.....	23, 35, 36
Dressing baby, demonstrations of.....	15,	meetings of.....	38
22, 39, 48, 84		message to.....	37, 91, 138-141
Editors, cooperation of.....	14, 30	Federal agencies.....	10, 16, 118
<i>See also</i> Newspapers.		<i>See also</i> Children's Bureau.	
Educational Exhibit Co.....	121	Federations of women's clubs.....	7, 9,
Employers of women, letter to.....	59	13, 19, 23, 27, 28, 64	
Epidemics, affecting baby-week plans.....	69,	Feeding baby, demonstration of.....	22, 47, 84
77, 81, 86		directions for.....	113
		Films. <i>See</i> Motion-picture.	
		Finance committee.....	14, 25, 72
		"Flag Day".....	61
		Flag, day.....	24, 25, 35, 53, 74, 75
		distribution.....	21, 25, 35, 75
		kind of, used.....	25, 35, 75
		Follow-up work, after baby-health conference.....	24, 89
		committees.....	65, 94
		development of existing work.....	24,
		65, 84	
		importance of.....	56, 64, 70, 94-99

	Page.		Page.
Follow-up work in rural districts----	21	Infantile paralysis, affecting baby-	
kinds of-----	25, 26, 64-67, 80, 94-99	week plans-----	69, 77, 81, 88
State-wide-----	64	after-care-----	69, 70
<i>See also</i> Results.		exhibits of muscle training for	
Food-----	17,	patients-----	69, 92
22, 39, 47, 63, 67, 81, 84, 94, 115, 118		Infant mortality, causes of-----	79, 110
Foreign countries, infant mortality		club study of-----	66, 99
statistics of-----	109	rates of, in different countries---	109
Foreign languages, addresses in----	54	securing data concerning-----	43,
announcements of baby week in---	75	44, 66, 78, 99	
exhibit guides speaking-----	23, 48, 54	shown on map-----	80
instruction of mothers speaking---	46, 55	statistics of-----	29,
newspapers in, to publish an-		30, 34, 43-45, 56, 78-80, 109	
nouncements about baby		Infant-welfare societies-----	10
week-----	24, 25, 75	13, 23-24, 64, 65, 71, 95, 97, 111-112	
pamphlets in-----	24-26, 33, 55	Infant-welfare stations, demonstra-	
posters in-----	46	tion of-----	76, 85
General Federation of Women's		equipment of-----	84, 98
clubs-----	7, 9	opened after baby week-----	26,
<i>See also</i> Federation of women's		65, 70, 86, 97, 98	
clubs.		rural-----	70, 97, 98
Girls, instruction of, in infant		sale of milk at-----	97
care-----	21, 41, 64, 66, 77, 96, 98	work of-----	79, 80, 84, 97, 98, 112
Government publications-----	10, 16, 55, 118	Informal meetings. <i>See</i> Meetings.	
Governor's proclamation-----	9, 27, 30, 36	Information on baby welfare. <i>See</i>	
		Baby-welfare information.	
Hall for meetings, choosing-----	89	Instruction in baby care-----	21,
Health officer. <i>See</i> Departments or		26, 41, 64, 66, 77, 80, 95-98, 111	
boards of health; State health		<i>See also</i> Baby-health conference;	
officer.		Exhibits; Pamphlets.	
Health officers, bulletins issued		Invitations issued, general-----	54, 99
by-----	33, 56, 121-131	on flag day-----	25, 53, 75
cooperation of. <i>See</i> Coopera-		through school children--	38, 39, 53, 85
tion; State health officers.		Labor unions, cooperation of-----	71
lectures by-----	33, 34, 90, 121-131	Lantern slides--	23, 31, 33, 34, 54, 91, 118-131
to be consulted before confer-		Large cities. <i>See</i> Cities; City cele-	
ence is held-----	81	brations.	
statistics on infant mortality		Layettes, exhibits of-----	15, 46, 48, 84
compiled by-----	84, 80	Leaflets, cards, tags, etc-----	20,
History of baby week-----	9-13	23, 25, 33, 37, 44, 59, 92, 93, 138, 142	
Home day-----	35	Lecturers, how secured-----	18,
Home Economics, Office of-----	10, 118	33, 34, 90, 121-131	
Home economics, divisions or depart-		Lectures, lantern slides for--	54, 118-131
ments of, at State colleges or		subjects for-----	78, 99
universities-----	30, 32, 123-131	Letter from mayor to clergy-----	113
Homemade articles, exhibit of-----	46, 144	Letter of transmittal-----	7
Homes of babies decorated with		Literature on baby care, bureau sup-	
flags-----	24, 35, 75	plying-----	118-131
Hostesses for exhibits-----	20, 26, 45, 58	original, for baby week-----	60-62
How to organize conferences. <i>See</i>		examples of-----	56, 57, 113-114
Baby-health conference.		in foreign languages-----	24-26, 33, 55
"I am the Baby"-----	62	means of distributing-----	12,
Improvement contest, baby-----	53, 88-89	16, 17; 22, 24, 25, 36, 47, 55, 63, 92	
Inauguration day-----	35	Little brother and sister day-----	15, 41
Indian reservations, baby weeks at--	11	Little Mothers' day-----	35, 113, 137
Indian Service-----	10	Little Mothers' Leagues-----	37,
Industrial conditions, follow-up work		46, 64, 66, 77, 98, 112	
and-----	94	Living features. <i>See</i> Baby-health con-	
Infant blindness-----	29, 80, 120	ference; Demonstrations; Ex-	
Infant care-----	21,	hibits; Parades; School chil-	
26, 41, 46, 77, 80, 95, 96, 98, 111, 113		dren, help given by; School	
<i>See also</i> Exhibits; Pamphlets.		day.	
Infant deaths, causes of, in com-		Local organizations cooperating. <i>See</i>	
munity-----	29, 78-80	Cooperation.	
<i>See also</i> Infant mortality.		Luncheons, school-----	63, 67, 115

	Page.
Manual-training classes, etc., cooperation of.....	17, 21, 39, 45
Map, local, to show where babies die.....	80
of baby-week celebrations.....	2
Market baskets, contents of, good and bad.....	17
Mass meeting.....	89-90
<i>See also</i> Meetings.	
Material for exhibits. <i>See</i> Exhibits.	
Mayor, letter of.....	113
proclamation of.....	9, 30, 36
Medical inspection of school children.....	19, 56, 66
Meetings, advertising of.....	45, 46, 54, 90
<i>See also</i> Publicity.	
for non-English-speaking mothers.....	54
informal.....	22, 53, 76, 91
invitations for.....	38, 39, 53, 54
mass.....	89-90
popular features for.....	15,
22, 24, 31, 33, 34, 45, 54, 55, 90-92	
speakers at.....	18, 33, 34, 90, 121-131
subjects for.....	18, 20, 23, 78, 90, 91
where held.....	14,
21-23, 38, 54, 63, 81, 89, 91, 94	
Men's organizations, assistance of.....	20,
	71, 90
<i>See also</i> Cooperation.	
discussions at meetings of.....	91
Merchants' baby booster day.....	35
Merchants (cooperation of), in advertising.....	15, 63, 94
in exhibits.....	23, 24, 63, 81, 84, 94
general.....	14, 19
Message to fathers. <i>See</i> Fathers.	
Midwives, regulation of, as result of baby week.....	26, 64
Milk, distribution of tags with.....	60
modification of.....	22, 39, 47, 84, 115
sale of, at infant-welfare stations.....	97
study of local supply.....	26,
45, 64, 70, 79, 94	
Milkmen, letter sent to.....	60
Milk stations, attendance at.....	53
founded.....	65, 136
study of.....	80
visited on parade day.....	37, 76
<i>See also</i> Infant-welfare stations.	
Models. <i>See</i> Exhibits, articles or models.	
Modification of milk, exhibit of.....	22,
47, 84, 115	
Money, methods of raising.....	14, 21, 25, 72, 73
Monthly health bulletin, State.....	83,
56, 121-131	
Mortality, infant. <i>See</i> Infant mortality.	
Mothers, competitions. <i>See</i> Competition, better mothers.	
day.....	35
instruction of.....	26,
66, 80, 95, 97-98, 111	
<i>See also</i> Baby-health conference; Exhibits; Pamphlets.	

	Page.
Mothers, obstetrical care of.....	70, 80
prenatal care of.....	23, 47, 65, 66,
70, 79, 80, 82, 95, 111, 136, 139	
Motion-picture, films.....	24, 33, 54, 92, 118-131
houses, baby-week films exhibited by.....	23, 25
cooperation of.....	63
publicity through.....	28-25
Musical numbers, on programs.....	15, 90
at exhibit.....	45
Music, list of suitable.....	148
Names and addresses of babies, how secured.....	42, 43, 75
National, Association for the Study and Prevention of Tuberculosis.....	120, 134
Child-Welfare Exhibit Association.....	121
Committee for the Prevention of Blindness.....	120
Congress of Mothers and Parent-Teacher Associations.....	10
Organization for Public-Health Nursing.....	96, 97
Organizations. <i>See</i> Campaigns, local, outside assistance for; History of baby week.	
Nation-wide baby week, agencies cooperating.....	9, 10
communities celebrating.....	11, 101-108
extent of.....	10, 11
plans for 1917.....	13, 69, 70
results of.....	64-67
Newspapers, assistance before campaign.....	14, 25, 30, 93
competitions carried on by.....	51, 53, 89
coupons, for birth registration.....	42
for appointments at health conference.....	51
foreign, notices in.....	24, 25, 75
<i>See also</i> Press material; Publicity.	
Newspaper syndicates, material supplied by.....	93
Noncompetitive baby-health conference.....	16, 49-50, 87-88, 132-133
Non-English speaking mothers, distribution of literature to.....	24-26,
33, 55	
exhibits for.....	23, 46, 48, 54
meetings for.....	54
notices to, in newspapers.....	24, 25, 75
Number of local campaigns.....	11, 108
Numbers attending meetings.....	20, 23, 26, 89
Nurse, duty of, at baby-health conference.....	87
<i>See also</i> Public-health nurse.	
Nursery, model, exhibit of.....	32
Object of campaign, advantages of specific.....	56, 70, 94
Objects for exhibits. <i>See</i> Exhibits, articles or models.	
Obstetrical care. <i>See</i> Mothers, obstetrical care of.	
Office of Home Economics.....	10, 118

	Page.		Para.
Operettas, suitable-----	143	Press, material-----	33,
Ophthalmia neonatorum. <i>See</i> Infant blindness.		34, 37, 56, 57, 74, 78, 86,	
Organization of local baby week--	12, 14, 15, 16, 20, 21, 23, 25, 29, 70-72	90, 93, 118-131, 136-138	
Organizations, cooperating. <i>See</i> Campaigns (local), outside assistance for; Cooperation.		Private organisations, material obtainable from-----	119-121
furnishing exhibits and literature, Federal-----	118	Prises,	
private-----	119-121	for improvement in babies-----	53, 88
State-----	121-131	indifference of mothers to-----	49
Outing day-----	37, 69, 76, 136	organisations donating-----	40, 89
		<i>See also</i> Competitions.	
Pageants. <i>See</i> Plays, tableaux, and pageants.		Proclamation, governor's-----	9, 27, 30, 36
Paid, director-----	72, 73	mayor's-----	9, 30, 36
press agent-----	93	Program, committees-----	72
Pamphlets on baby care, distribution of-----	12, 16, 17, 22, 24, 25, 36, 47, 55, 63, 92	for a baby day-----	21-22, 74
in foreign languages-----	24-26, 33, 55	of days for baby week-----	15,
sources for obtaining-----	117-131	24, 25, 27, 29, 35, 41, 53, 73	
Panama-Pacific Exposition, list of articles in Children's Bureau at exhibit on infant care-----	114-115	Programs, distribution of-----	24, 35, 57
Panels, making of-----	17-18, 26, 33, 82, 83, 116, 117	for special days-----	25,
subjects for-----	116, 117	26, 29, 35-43, 74-78	
<i>See also</i> Exhibits.		suggestions for baby week-----	73-74
Parade day-----	37, 69, 76	<i>See also</i> Meetings.	
Parades-----	22, 36, 37, 38, 69, 76, 77	Publications-----	10,
precautions for safety of-----	36, 77	16, 33, 43, 44, 55, 56, 118-131	
Pennants. <i>See</i> Flag.		<i>See also</i> Pamphlets on baby care.	
Permanent organization day-----	35	Public-health nurse--	19, 22, 41, 56, 64-66,
Personal invitations to meetings-----	53	70, 71, 79, 80, 91, 94,	
<i>See also</i> Invitations.		98, 112, 119, 121, 137	
Photographs, used on panels-----	83	Public Health Nurse Quarterly--	97, 121
of speakers-----	90	Public Health Service-----	10, 118
Physical examinations-----	18, 19, 66, 95	Publicity, committee on-----	28, 72
<i>See also</i> Baby-health conference.		follow-up-----	24, 68, 95
Physicians. <i>See</i> Cooperation of physicians.		for meetings-----	38, 39, 45,
Piano solos, suitable-----	143	46, 53, 54, 90, 93	
Plans for 1917-----	13, 69, 70	how secured-----	16, 24, 25, 28, 35, 45,
Playgrounds, developed as result of baby week-----	56, 67	51, 54, 57-60, 75, 85, 90, 93	
model of, in exhibit-----	45, 63	on sources of information for parents-----	55, 92
workers, cooperation of-----	71	State-wide-----	28-30, 33, 57
Plays, tableaux, and pageants, audience attracted by-----	55, 90	subcommittees on-----	72
popularity of-----	22-24, 54, 92	<i>See also</i> Advertising; Baby-welfare information; Newspaper; Press material.	
suitable-----	134-136	Public Service Exhibit Bureau-----	121
Poems-----	60-62	Purpose of baby week. 9, 64, 69, 70, 94, 112	
Policing of streets arranged for parades-----	36, 77	Questions, used in better-mothers competition-----	52, 53, 89
Posters-----	17, 25, 39, 46, 51, 58, 59	about celebrations answered by organisations and public agencies-----	69, 119-131
Prayer for babies-----	143	Reclamation Service-----	10
Preliminary work. <i>See</i> Campaigns, local.		Recognition day-----	35
Prenatal care. <i>See</i> Mothers, prenatal care of.		Record sheet used at baby-health conferences-----	88, 132-133
President of the United States indorsed campaign-----	9	Records, of births-----	38, 42-
Press, agent, paid-----	93	44, 64, 77, 78, 94, 98	
assistance of. <i>See</i> Newspapers.		of deaths-----	43, 44, 75, 78-80
		Registrars of vital statistics-----	10,
		42, 43, 75, 78, 98	
		Registration of births. <i>See</i> Birth registration.	
		Religious bodies. <i>See</i> Cooperation of religious bodies.	
		Reports of local campaigns, how secured-----	10, 11, 31, 100, 101

	Page.
Results--	15, 19, 21, 26, 41, 45, 56, 64-67, 70
<i>See also</i> Follow-up work.	
Rural campaigns-----	11, 14, 16, 23, 65, 71
<i>See also</i> City celebrations shared by neighboring country.	
Rural children's needs----	16, 18, 52, 97-98
Rural infant-welfare station. <i>See</i> Infant-welfare stations.	
Rural mother's day-----	35
Russell Sage Foundation-----	85, 117, 120
Sabbath, Baby-----	24, 76, 143-144
<i>See also</i> Baby Sunday.	
School, centers opened-----	15, 19, 65
children help given by--	16, 17, 21, 27, 38, 39, 41, 43, 45, 51, 53, 54, 85
day-----	85, 38-41, 77, 113
girls instructed in infant care--	21, 41, 64, 66, 77, 96, 98
houses, use of-----	14, 15, 19, 22, 38, 49, 54, 81, 89
luncheons-----	63, 67, 115
nurse. <i>See</i> Public-health nurse.	
teachers, cooperation of-----	22, 31, 39, 71, 113-114
Schools, cooperation of. <i>See</i> Cooperation.	
pledge to baby in-----	62, 137
sanitation of, studied-----	66
<i>See also</i> Plays, tableaux, and pageants.	
Score card, use of, at baby-health conference-----	88
where to obtain-----	119
Secretarial services, volunteer-----	26, 72
Secretary of Labor, indorsement by	9
Settlement houses, cooperation of--	24, 54, 91
Shop meetings-----	36, 54
Slogans, examples of-----	20, 21, 35, 37, 58
means of securing-----	30, 57
uses of-----	50
Societies. <i>See</i> Infant-welfare societies; Men's organizations; Women's organizations.	
Songs, list of suitable-----	143
Speakers for meetings, how to secure-----	18, 33, 34, 90, 121-131
State, agencies, assistance of-----	17, 27, 30-34, 48, 55, 80, 90, 92, 121-131
agricultural colleges. <i>See</i> Agricultural colleges and universities.	
bureaus of child hygiene-----	31, 34, 99
campaigns-----	11, 27-30, 33, 64
exhibits, inexpensive-----	33
federations of women's clubs--	9, 19, 27, 28, 64
governor's proclamation--	9, 27, 30, 36
health officers-----	24, 27, 32-34, 40, 43, 45, 48, 50, 56, 57, 66, 69, 81, 85, 86, 90, 91, 98, 99, 116, 121-131, 137, 139
<i>See also</i> Registrars of vital statistics.	

	Page.
State organizations, cooperation among-----	27-34
universities. <i>See</i> Agricultural colleges and universities.	
States Relations Service-----	10, 118
Stationery-----	59
Statistics of infant mortality-----	29, 30, 34, 43-45, 56, 78-80, 109
Stenographers. <i>See</i> Clerical help.	
Stereopticon slides-----	33, 91, 121-131
Study and conference day-----	29
<i>See also</i> Community needs, study of.	
Study clubs suggestions for-----	99
<i>See also</i> Community conditions; Community needs.	
Subjects, suitable for informal discussions-----	18, 20, 23, 53, 78, 91, 96
suitable for public lectures--	78, 90, 96
<i>See also</i> Exhibits.	
Sunday schools, baby-week exercises in-----	36
Superintendent of schools, cooperation of-----	38, 71
Supervision of exhibits necessity for-----	63, 64, 94
Survey of birth registration--	16, 29, 43, 78
<i>See also</i> Community conditions; Community needs.	
Synagogues. <i>See</i> Cooperation of religious bodies.	
Syndicates, newspaper-----	93
Tableaux, <i>See</i> Plays, tableaux, and pageants.	
Tag day-----	35
Tags-----	59-60
Topics, suitable for informal discussions-----	18, 20, 23, 53, 78, 91, 96
suitable for public lectures--	78, 90, 96
<i>See also</i> Exhibits.	
Towns, campaigns in-----	14-16
<i>See also</i> Cities; City celebrations.	
Toys-----	17, 18, 46, 144
United States, Bureau of Education--	16
Children's Bureau. <i>See</i> Children's Bureau.	
Department of, Agriculture--	10, 16, 118
Interior-----	10, 16
Government publications--	10, 16, 55, 118
Indian Service-----	10
Public Health Service-----	10, 118
Reclamation Service-----	10
Universities, State. <i>See</i> Agricultural colleges and universities.	
Violin selections, suitable-----	143
Visiting day-----	35, 37, 73, 76
precautions to be taken for--	77
<i>See also</i> Parades.	
Visiting nurse. <i>See</i> Public-health nurse.	

	Page.		Page.
Volunteer workers-----	26, 72	Women's Christian Temperance Un-	
<i>See also</i> Cooperation; Women's or-		ion -----	26, 42
ganisations.		Women's organisations, committees	
Wall panels. <i>See</i> Panels.		to include members of-----	71, 133
Welfare day -----	35	cooperation of -----	3, 13,
Windows in stores, use of-----	15,	17, 19, 20, 23, 25-28, 36, 45, 58, 66, 71	
19, 20, 25, 28, 31, 49,		follow-up work by-----	64-66, 90
58, 63-64, 74, 81, 94		initiative taken by-----	13, 19, 25, 71
		study of local conditions by-----	43,
			44, 73, 80, 92

ADDITIONAL COPIES

OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.

AT

25 CENTS PER COPY

▽

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, CHIEF

A TABULAR STATEMENT OF
INFANT-WELFARE WORK BY PUBLIC
AND PRIVATE AGENCIES IN THE
UNITED STATES

BY

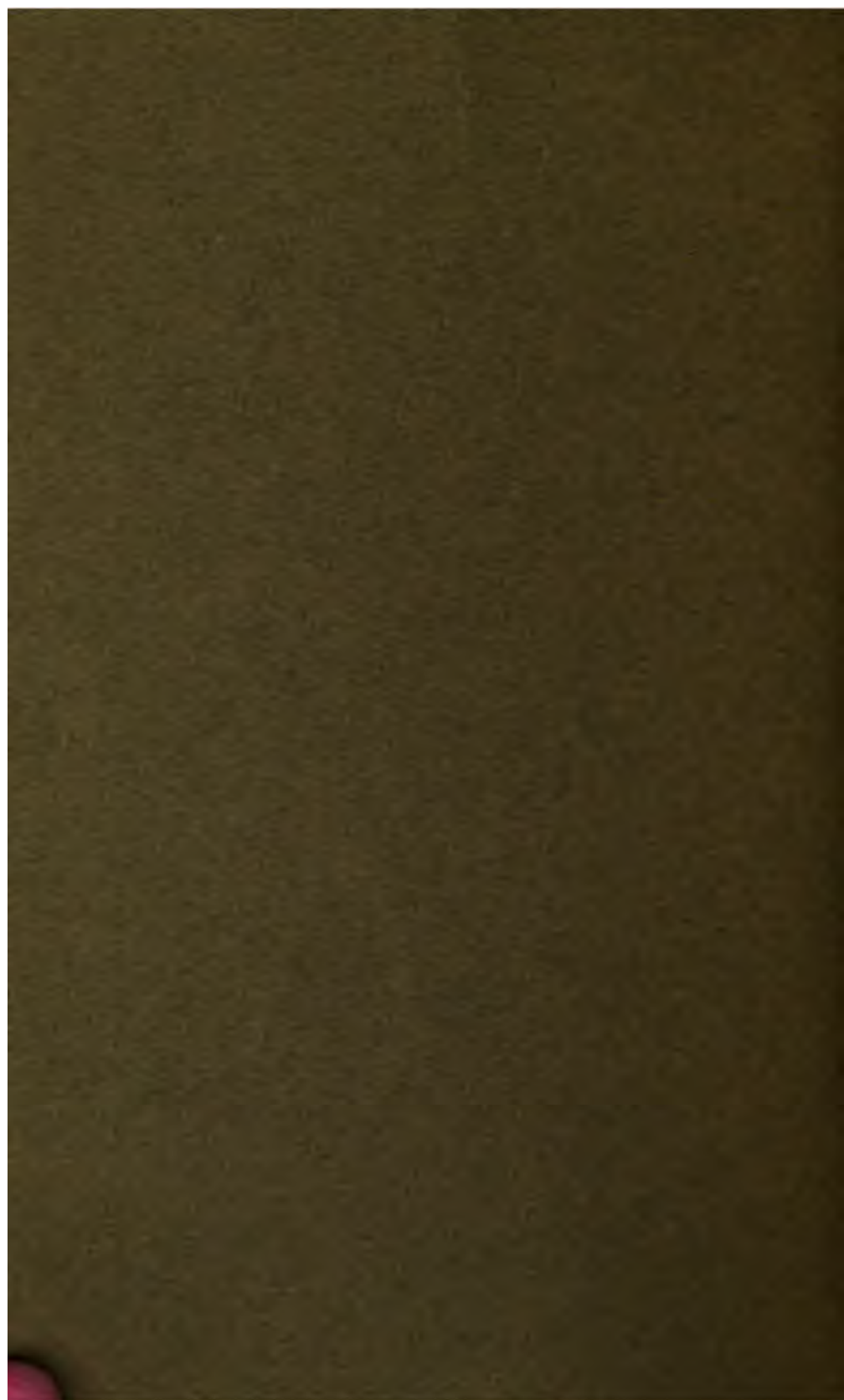
ETTA R. GOODWIN

INFANT MORTALITY SERIES No. 5

Bureau Publication No. 16



WASHINGTON
GOVERNMENT PRINTING OFFICE
1915



U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

A TABULAR STATEMENT OF
INFANT-WELFARE WORK BY PUBLIC
AND PRIVATE AGENCIES IN THE
UNITED STATES

BY

ETTA R. GOODWIN

INFANT MORTALITY SERIES No. 5

Bureau Publication No. 16



WASHINGTON
GOVERNMENT PRINTING OFFICE
1916

PUBLICATIONS OF THE CHILDREN'S BUREAU.

Annual Reports:

- First Annual Report of the Chief, Children's Bureau, to the Secretary of Labor, for the fiscal year ended June 30, 1913. 29 pp. 1914.
Second Annual Report of the Chief, Children's Bureau, to the Secretary of Labor, for the fiscal year ended June 30, 1914. 19 pp. 1914.
Third Annual Report of the Chief, Children's Bureau, to the Secretary of Labor, for the fiscal year ended June 30, 1915. 26 pp. 1915.

Care of Children Series:

- No. 1. Prenatal Care, by Mrs. Max West. 41 pp. 3d ed. 1913. Bureau publication No. 4.
No. 2. Infant Care, by Mrs. Max West. 87 pp. 1914. Bureau publication No. 8.

Dependent, Defective, and Delinquent Classes Series:

- No. 1. Laws Relating to Mothers' Pensions in the United States, Denmark, and New Zealand. 102 pp. 1914. Bureau publication No. 7.
No. 2. Mental Defectives in the District of Columbia: A brief description of local conditions and the need for custodial care and training. 39 pp. 1915. Bureau publication No. 13.

Infant Mortality Series:

- No. 1. Baby-saving Campaigns: A preliminary report on what American cities are doing to prevent infant mortality. 93 pp. 4th ed. 1914. Bureau publication No. 3.
No. 2. New Zealand Society for the Health of Women and Children: An example of the methods of baby-saving work in small towns and rural districts. 19 pp. 1914. Bureau publication No. 6.
No. 3. Infant Mortality: Results of a field study in Johnstown, Pa., based on births in one calendar year, by Emma Duke. 93 pp. and 9 pp. illus. 1915. Bureau publication No. 9.
No. 4. Infant Mortality in Montclair, N. J.: A study of infant mortality in a suburban community. 36 pp. 1915. Bureau publication No. 11.
No. 5. A Tabular Statement of Infant-Welfare Work by Public and Private Agencies in the United States. 114 pp. 1916. Bureau publication No. 16.

Industrial Series:

- No. 1. Child Labor Legislation in the United States, by Helen L. Sumner and Ella A. Merritt. 2 charts. 1131 pp. 1915. Bureau publication No. 10.
Analytical tables of laws of all States and text of laws of each State.
No. 2. Administration of Child Labor Laws:
Part 1. Employment Certificate System, in Connecticut. 69 pp. 2 charts. 1915. Bureau publication No. 12.

Miscellaneous Series:

- No. 1. The Children's Bureau: A circular containing the text of the law establishing the bureau and a brief outline of the plans for immediate work. 5 pp. 1912. Bureau publication No. 1.
No. 2. Birth Registration: An aid in preserving the lives and rights of children. 20 pp. 3d ed. 1914. Bureau publication No. 2.
No. 3. Handbook of Federal Statistics of Children: Number of children in the United States, with their sex, age, race, nativity, parentage, and geographic distribution. 106 pp. 2d ed. 1914. Bureau publication No. 5.
No. 4. Child-Welfare Exhibits: Types and preparation, by Anna Louise Strong, Ph. D. 58 pp., 16 illus. 1915. Bureau publication No. 14.
No. 5. Baby Week Campaigns. Suggestions for communities of various sizes. 64 pp. 1915. Bureau publication No. 15.

CONTENTS.

	Page.
Letter of transmittal.....	5
Introductory.....	7
State boards or departments of health.....	7
Extension divisions of State universities.....	18-20
Work by State universities to promote infant welfare.....	18
Cities of 10,000 population and over.....	21-33
City bureaus or divisions of child hygiene.....	21
Directory of infant-welfare agencies.....	22-33
Infant-welfare stations.....	26
Instruction by nurses not connected with infant-welfare stations.....	27
Prenatal work.....	28
Little Mothers' Leagues or classes for instructing young girls in infant hygiene.....	28
Work for prevention of infant blindness.....	32
Milk inspection.....	32
Hospitals and dispensaries.....	33
Cooperation between agencies.....	33
Cities in different classes.....	33
Comparison of work by municipal and private agencies.....	36

GENERAL TABLES.

Table 1. Infant-welfare work by municipal and private agencies in cities and towns having a population in 1910 of 10,000 and over, 1915.....	40
Table 2. Examples of infant-welfare work in cities and towns having a population in 1910 of less than 10,000, 1915.....	96
Table 3. Milk inspection in certain cities and towns having a population in 1910 of 10,000 and over, 1915.....	100
Table 4. Summary of State laws and rulings relating to the prevention of blindness from babies' sore eyes (no county or city acts, ordinances, or rulings included).....	106

Details of the State requirements for reporting babies' sore eyes.....	112
--	-----



LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, D. C., April 6, 1916.

SIR: I transmit herewith a tabular statement of infant-welfare work by public and private agencies in the United States. In preparing a discussion of this subject it was found necessary to divide the material into two reports. The first consists of the tabular statement presented herewith and the second will give a detailed description of the most significant instances of public and private infant-welfare work. The tabular statement is published in advance because of its general interest as a comparative presentation of State, municipal, and volunteer agencies throughout the United States. It is to be noted that the activities listed in this tabulation are concerned chiefly with safeguarding the health of well children; not with the treatment of sick children.

The tabulation indicates the nation-wide extent of the movement to protect infant life. Nothing short of a revolution is taking place in the attitude of physicians and social students. They increasingly urge constructive measures for preserving health and for stimulating and improving home care. Emphasis is placed upon the absolute necessity of providing sound instruction in the hygiene of infancy and childhood and of making it convenient for parents to secure information as to the healthful regimen for the individual child. Systems are in course of development for providing such examinations and tests of well children as will enable parents to forestall disease. As will be seen, public authorities and private agencies are working out practical methods in various phases of the whole problem.

The work of collecting and tabulating the information has been done by Mrs. Etta R. Goodwin, assisted by Miss Dorothy Henderson, under the general direction of Dr. Grace L. Meigs, head of the division of hygiene.

Very respectfully,

JULIA C. LATHROP, *Chief.*

Hon. WILLIAM B. WILSON,
Secretary of Labor.



A TABULAR STATEMENT OF INFANT-WELFARE WORK IN THE UNITED STATES.

INTRODUCTORY.

The report which follows represents an effort to outline the extent of the work carried on in the United States for the reduction of infant mortality. It presents, for each State and for each city of 10,000 population and over according to the census of 1910, a statement of the civic measures adopted for the reduction of the infant death rate, and indicates the infant-welfare work by private agencies in these cities and characteristic work in some smaller communities. Full descriptions of the methods used by both public and private agencies will be furnished in another report now in preparation.

In collecting the information, schedules or inquiries were sent out early in 1915. These were addressed to the State health officers in all States, to the secretaries of all State colleges and universities, to health officers in cities of 10,000 population and over, and to private agencies on lists courteously supplied by Miss Ysabella Waters, chairman of the membership committee of the National Organization for Public Health Nursing, and author of "Visiting Nursing in the United States"; by the American Association for the Study and Prevention of Infant Mortality; and by the American National Red Cross Town and Country Nursing Service. In this initial report a complete and original census of all phases of infant-welfare work by private agencies was not regarded as practicable. The choice of agencies addressed is the result of the investigations of individuals and agencies in close touch with infant-welfare activities in all sections of the country.

STATE BOARDS OR DEPARTMENTS OF HEALTH.

Four States—Kansas,¹ New Jersey,¹ New York, and Ohio¹—reported distinct divisions of their State departments of health dealing specifically with problems of infant and child hygiene. In Massachusetts infant-welfare work is a well-defined feature of the work of the division of hygiene.

¹ Division organized subsequent to January, 1915. Infant-welfare work developed since that date not shown in this report.

Infant-welfare work by State

State.	Work for promotion of birth registration.	Educational work on the subject of infant hygiene.	
		Pamphlets, leaflets, etc.	Exhibits, lantern slides, motion pictures, etc.
Alabama.....	Space given in bulletins to discussion of importance.	Pamphlet, On the Baby..	Lantern slides on infant hygiene.
Arizona.....	1 number monthly bulletin (July, 1914) devoted to question.		
Arkansas.....	Cooperation with child-welfare associations in such effort.		
California.....	Efforts directed toward passage of good law recently enacted.		General health car; lantern slides.
Colorado.....			Lantern slides; motion-picture films.
Connecticut.....	Interest stimulated by constant reference to subject in bulletins.		
Delaware.....			
Florida.....	Active campaign; extensive space in bulletins; cartoons; letters to county and city officers, women's clubs, etc.	Pamphlet, Baby Welfare..	Traveling exhibit on public health; panels, models, special section relating to infant hygiene; lantern slides.
Georgia.....	No appropriation for putting in operation good registration law recently passed.	Pamphlets distributed through a mailing list.	Exhibits at various county fairs; lantern slides.
Idaho.....	Literature sent to mother upon registration of a birth.	Leaflets, If You Have a Baby, distributed to mother upon registration of a birth.	Lantern slides on general health.
Illinois.....	Motion picture, Tommy's Birth Certificate, or The Sin of Omission, offered to picture-theater managers gratis; effort toward putting in operation good registration law recently passed.	Pamphlet on the care of the baby.	Traveling exhibit, mechanical and still models, wall cartoons, 100 lantern slides, motion-picture films; sections on infant mortality, flies, etc., booked for months in advance.
Indiana.....	Continual agitation to improve birth registration; search for unreported births and prosecution of delinquent physicians; letter to mother upon registration of a birth.	The Baby Book sent to mother upon registration of a birth; pamphlets and circulars, Summer Care of Babies, Indiana Child Creed.	General health exhibit emphasizing infant hygiene; wall panels, models, 6 motion-picture films, 800 lantern slides.
Iowa.....	Agitation for passage of good registration law.	Reprint of special bulletin, Save the Babies.	Child hygiene exhibit shown at State and county fairs, etc.; electric devices.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

9

departments of health, 1915.

Educational work on the subject of infant hygiene—Continued.					Other work touching on infant hygiene or welfare.
Lectures, by whom given.	Bulletins.		Newspaper articles.		
	How often issued.	Class.	How often issued.	Class.	
Lecturers supplied by State board of health.	Quarterly..	General health.....			Health laws only 2 years old.
do.	do.	General health; reference to infant hygiene; 1 number on birth registration.			
Lectures by members of State board of health on infant hygiene.	Monthly...	General health.....	From time to time.	Summaries of birth statistics.	Campaign against irregular lying-in hospitals.
do.					
	Monthly...	Give space to warnings against patent medicines, etc.; occasional reference to seriousness of infant mortality problem.			
Lecturers supplied by health department.	Monthly...	General health; special birth-registration cartoons.	From time to time.	Articles on general health and vital statistics.	Cooperation with women's organizations in arranging better-babies contests.
Illustrated lectures given by State board of health.	Quarterly..	General health.....	No regular time.	Articles on infant hygiene in city and county papers.	
Lecturers supplied by board of health.			Weekly...	Literature on general health subjects sent to newspapers; stereotype cuts and plates supplied.	
Frequent lectures by members of State board of health with reference to infant hygiene.	Monthly...	General health.....	Biweekly.	Plainly written health stories sent to newspapers; definite date of release. Practically every paper in State takes material and publishes in prominent place.	Child-welfare exposition held in Indianapolis, February, 1915.
Lecture force of 4 members of State board of health; special reference to subjects related to infant hygiene.	do.	Frequent reference to the welfare of infants.	Weekly...	Letter sent out through press service; general health subjects, frequent mention of infant hygiene.	
	Quarterly..	Profusely illustrated; occasional infant hygiene article.			Physicians supplied for organizing and conducting baby health contests and conferences.

Infant-welfare work by State

State.	Work for promotion of birth registration.	Educational work on the subject of infant hygiene.	
		Pamphlets, leaflets, etc.	Exhibits, lantern slides, motion pictures, etc.
Kansas..... (Division of Child Hygiene, July 1, 1915.)	Checking system and prosecutions.	Bulletins, Care of Infants, Save the Babies.	General health exhibit, including reference to infant hygiene; motion pictures; lantern slides.
Kentucky.....			General health traveling exhibit.
Louisiana.....	Propaganda through circulars and personal letters toward passage of model law; pamphlet sent and letter written to mother upon registration of a birth.	Pamphlet on How to Keep the Baby Well and leaflets distributed from health exhibit car.	Educational hygiene exhibit train, more than one-sixth of space given to subject of infant welfare; 2 motion-picture films; stereopticon outfit.
Maine.....	Check by clippings from newspapers; leaflets and posters explaining importance.	Series of leaflets on child welfare widely distributed.	Traveling exhibit on child welfare is combined with exhibit on school hygiene.
Maryland.....	Prosecution of physicians and midwives failing to report births; educational pamphlets, leaflets, etc.	Pamphlets, leaflets, etc., on birth registration.	General health car; lantern slides.
Massachusetts.....	Canvassers sent from house to house checking up births; collection of vital statistics under secretary of the Commonwealth.	Educational leaflets, For Mothers with Little Babies, in 3 languages.	Lantern slides; motion-picture films.
Michigan.....	Under secretary of state; system of checking by supervisors of townships or by assessors of cities.		Cartoons and mechanical devices on infant hygiene; lantern slides; general health car.
Minnesota.....	Constant reminders to local registrars; check births by deaths of infants under 1 year and investigate failure to report; weatherproof notice for tacking on trees, showing importance of birth registration.		Have had traveling general health exhibitions on the road at various times since 1907; not sent out during past year.
Mississippi.....	Reference in bulletins.....	Reprint of special bulletins, Protect the Babies, Save the Babies, etc.	Lantern slides on general health.

departments of health, 1915—Continued.

Educational work on the subject of infant hygiene—Continued.					Other work touching on infant hygiene or welfare.
Lectures, by whom given.	Bulletins.		Newspaper articles.		
	How often issued.	Class.	How often issued.	Class.	
Lectures by members State board of health; general health with reference to infant hygiene.	Monthly...	General health; special numbers on child hygiene.	Weekly...	Articles on general health subjects, reaching about 500 weekly newspapers; weekly press letter on child hygiene.	Plans for immediate future include rural surveys; efforts to encourage cities to establish visiting-nurse system.
4 sanitary inspectors in the field, visiting every precinct in many counties, accompanied by health exhibit; no separation of work for children and adults.	do.....	General health; issued in editions of 25,000.	Biweekly		
Members State board of health accompany health car sent to rural districts; emphasize importance of infant hygiene.	Monthly and quarterly.	1 issue of monthly bulletin devoted to subject of child hygiene; section in quarterly once yearly on infant hygiene.			
Lecturers from State board of health, accompanied by stereopticon, give talks on child welfare before the granges, at State fairs, etc.	Bimonthly.	General health; special reference to child hygiene.			Special study of antenatal mortality; campaign for better report of stillbirths. Plans being made for a campaign for educational work in infant hygiene through exhibits, lectures, bulletins, pamphlets, and newspaper articles; plan to take up question of public health nursing.
	Monthly (for health officers).	No printed bulletins; typewritten statements.			
	Monthly...	General health			
	do.....	General health; cartoons referring to infant mortality; special number devoted to infant welfare.			
Lectures by members of State board of health on subject of infant hygiene.				Formerly sent articles to 200 papers throughout State; service temporarily discontinued.	
Lectures by county health officers in schools etc., on infant hygiene.	Monthly...	General health; special numbers, Protect the Babies, Save the Babies.			

Infant-welfare work by State.

State.	Work for promotion of birth registration.	Educational work on the subject of infant hygiene.	
		Pamphlets, leaflets, etc.	Exhibits, lantern slides, motion pictures, etc.
Missouri.....	Constant communication with local registrars; personal letters written in case of neglect to report births.		
Montana.....	Prosecution of physicians and midwives failing to report births.		Lantern and slides.....
Nebraska.....	Occasional reference in bulletins.		
Nevada.....			
New Hampshire...	Prosecution of physicians and midwives failing to report births.	Leaflet, Save the Babies' Eyes.	Lantern slides on milk...
New Jersey..... (Division of Child Hygiene and Nursing, Nov. 1, 1915).	State board of health has power to compel local boards to prosecute delinquent physicians or midwives.		Traveling exhibit on tuberculosis, with some reference to care of babies; motion-picture machine.
New Mexico.....			
New York..... (Division of Child Hygiene, Jan. 2, 1914).	Posters, etc.; panels in traveling exhibit; notification card and pamphlet, Your Baby—How to Keep It Well, sent to mother upon registration of a birth; numerous devices for making it convenient for physicians to comply with requirement.	Pamphlet, How to Save the Babies; circulars of information, Before the Baby Comes, The New-born Baby, The Food of a Baby, The Summer Care of Baby, Care of Milk in the Home, From the Bottle to Table Food, Avoiding Infection, Your Baby—How to Keep It Well (3 languages); Infant-welfare Campaigns and Infant-welfare Stations (pamphlet giving information helpful to communities wishing to establish infant-welfare stations).	3 traveling exhibit units (20 panels, infant-welfare station, etc.), each in charge exhibit manager, trained nurse, and mechanician, in special campaign in 1914 visited 45 cities and villages and 55 county fairs, with object of encouraging establishment of infant-welfare stations in the smaller communities.
North Carolina.....	Booklet, Why Register Births and Deaths, distributed; frequent mention in bulletins; letters to mother from governor and State health officer upon registration of a birth.	Pamphlet, The Baby; leaflet on How to Keep Your Baby Well.	Exhibit with 1 section on Care and Feeding of Infants; health exhibit connected with baby contest at State fair; lantern slides on infant hygiene.
North Dakota.....			

of health, 1915—Continued.

Educational work on the subject of infant hygiene—Continued.

Lectures, by whom given.	Bulletins.		Newspaper articles.		Other work touching on infant hygiene or welfare.
	How often issued.	Class.	How often issued.	Class.	
	Quarterly..	General health; occasional article on infant hygiene.			
	Monthly...	General health...		Child-welfare department organized temporarily with trained nurse in charge, for work with women's clubs.	
	Quarterly..	General health; occasional articles on infant hygiene.			Better - babies contest at State fair.
Lecturers supplied by board of health.	Quarterly..	General health...			
Department of health lecturers in tuberculosis campaign incidentally emphasize principles involved in care of babies.	Monthly...	do	Weekly...	General health...	
Director division child hygiene, during infant-welfare campaign, delivered several addresses a week; 3 lecturers from division of publicity and education accompany exhibit.	Monthly...	Sections in bulletins on infant-welfare campaign, management of infant-welfare stations, Little Mothers' Leagues, care of baby, etc.	Weekly press service.	News bureau; copy and special cuts supplied for newspapers during tour of traveling exhibit; press service, 500-word health hints on such topics as "Infant feeding" mailed in "bottle plate" stereotyped and ready to be placed in forms.	State campaign with object of organizing infant - welfare stations in cities and rural districts; traveling exhibits viewed by 1,300,000 people in 45 cities and small villages and at 55 county fairs; baby-health conferences; 2 motion-picture films, Care of Babies and Improvement of Milk Supply; special meetings for mothers; homes visited; nurses address school children, establish Little Mothers' Leagues.
	do.	Section on infant hygiene: cartoons and illustrations.	Weekly...	Newspapers of State supplied with regular untechnical articles on health subjects.	100,000 pieces of literature on general health distributed.
Occasional lectures by health officer.	Quarterly..	Sections on care of children.			

Infant-welfare work by State

State.	Work for promotion of birth registration.	Educational work on the subject of infant hygiene.	
		Pamphlets, leaflets, etc.	Exhibits, lantern slides, motion pictures, etc.
Ohio..... (Division of Child Hygiene, Oct. 1, 1915.)	Through public-health exhibit, motion pictures, etc.	Pamphlet on infant hygiene.	Traveling exhibit, including motion pictures, sections devoted to subject of infant hygiene, and 1,500 lantern slides taken to smaller cities and towns and county fairs; large portion of rural communities of the State have been reached.
Oklahoma.....		Booklet addressed to mothers.	Lantern slides.....
Oregon.....	Effort directed toward putting in operation good law recently passed.		do.....
Pennsylvania.....	Checking-up system and prosecutions.	Pamphlet, Save the Baby.	Infant - welfare exhibit, portion of general-welfare exhibit; statistical material, mottoes, motion pictures; help given to communities wishing to establish exhibits.
Rhode Island.....		Pamphlet, Care of Babies; leaflet, How to Take Care of Babies.	Milk and mouth hygiene exhibit; lantern slides; motion-picture films.
South Carolina.....	Effort directed toward putting in operation good law recently passed.		Lantern slides.....
South Dakota.....		The Mother's Book published and distributed.	
Tennessee.....			General health exhibit, charts, motion pictures, lantern slides.
Texas.....	Importance emphasized in the monthly bulletin, also by efforts at prosecution of physicians and midwives failing to report births.		Public health exhibit car, of which infant hygiene is special feature.
Utah.....	Circulars sent to mother upon registration of a birth.	Circular teaching infant hygiene.	General health exhibit; lantern slides.
Vermont.....			Motion - picture films; electrical generator for use in operating motion-picture apparatus; lantern slides.

departments of health, 1915—Continued.

Educational work on the subject of infant hygiene—Continued.					Other work touching on infant hygiene or welfare.	
Lectures, by whom given.	Bulletins.		Newspaper articles.			
	How often issued.	Class.	How often issued.	Class.		
Lectures given in connection with traveling health exhibit; certain part devoted to subject of infant mortality.	Monthly...	General health...			Summer campaigns by department of health for lessening infant mortality.	
Lecturers supplied by department of public health.			Weekly...	Letter on general health matters; arrangements being perfected for beginning this service.		
Lectures by members of State board of health, with some reference to infant hygiene.	Quarterly...	General health...		Reporters of various papers visit office of State health officer every day and obtain material for articles.		
Lecturers from department of health accompany infant-welfare exhibit.	Monthly...		Weekly...			
Members of State board of health give lectures to mothers' clubs; 4 weeks' series of lectures to the foreign population, 1 lecture each week on care of infant.	Quarterly...	General health...				
Lectures by members of State board of health.						
	Quarterly...	General health...				
Members of State board of health give lectures on general health subjects.	...do...	Food...		Educational articles on general health subjects.		
Field workers in hookworm work touch upon matter of infant mortality.	Monthly...	Frequent reference to infant hygiene.	From time to time.	In weekly newspapers; general health subjects.		Infant hygiene dwelt upon by field workers in hookworm work.
Lectures by members of State board of health; general health subjects.	...do...	Statistical statements; occasional bulletins to health officers.				
Lectures by members of State board of health at baby shows, parent - teachers' association meetings, etc.	Quarterly...	General health....	Occasionally.	Articles on general or specific subjects of public health.		

Infant-welfare work by State

State.	Work for promotion of birth registration.	Educational work on the subject of infant hygiene.	
		Pamphlets, leaflets, etc.	Exhibits, lantern slides, motion pictures, etc.
Virginia.....	Notification card and copy of bulletin, Care of Infants, sent to mother upon registration of a birth. Numerous cartoons in bulletins.	Reprint bulletins, The Care of Infants, and Mother and Child; Health Handbook for Colored People, Catechism of Public Health, Virginia Health Almanac.	General health exhibit; section on infant welfare; motion pictures; lantern slides.
Washington.....	Frequent mention in bulletins; sections in exhibit; lecturer sent to secure cooperation of club women.	Pamphlets issued by United States Public Health Service, etc., distributed.	Exhibits on general health subjects, section on infant hygiene, shown at county fairs, etc.; lantern slides.
West Virginia	Effort toward having law amended.	Special bulletins on child hygiene.	
Wisconsin.....	Notification card and bulletin, Save Your Baby, sent to parents upon registration of a birth; publicity work through 8 deputy State health officers; local registrars instructed to report failures to file certificates.	Pamphlet, Save Your Baby, reprint special bulletins.	Models; motion-picture films, slides; 125 charts on health.
Wyoming.....			

As shown in this statement, of the 48 State boards or departments of health from which replies were received, all except 4 reported that they had been able to give some attention to the question of infant welfare as a distinct feature of health work. The reports show, however, that several States are obliged to limit this work to references in their monthly bulletins.

Birth registration is now recognized as an indispensable factor in infant-welfare work. Growing interest in effective registration is indicated by the fact that six States have been added within the last two years to those having laws founded upon the so-called "Model law" for the registration of births and deaths. Work for the improvement of birth registration was reported by 36 States.

Pamphlets, leaflets, etc., on infant care, according to the reports, are distributed by State departments or boards of health in 26 States. The importance of the exhibit as an aid in the educational work of

departments of health, 1915—Continued.

Educational work on the subject of infant hygiene—Continued.					Other work touching on infant hygiene or welfare.
Lectures, by whom given.	Bulletins.		Newspaper articles.		
	How often issued.	Class.	How often issued.	Class.	
Frequent lectures on care of infants by State board of health officials.	Monthly...	Special, Care of Infants; Mother and Child.	Weekly...	In form of 2 articles on general health subjects, 1 with definite release date, other as a "filler" to be used at discretion.	Publish Family Almanac and by means of fables and sketches drive home some health lesson applicable to each month.
Series of lectures by members of State board of health; commissioner has given about 100 lectures; infant hygiene emphasized.	do.....	General health, special on Birth Registration, etc.	do.....	do.....	
Occasional lectures by members of State board of health.	Quarterly..	Special on child hygiene; cartoons.	do.....	do.....	
Lectures by 5 deputy State health officers.	do.....	Special, Save Your Baby; frequent reference to importance of breast feeding, prevention of infant blindness, etc.	do.....	do.....	

State boards of health is generally recognized, as is made evident by the fact that 25 States now have exhibits with special panels, models, or contrivances relating to infant hygiene. It is estimated that the traveling exhibit of the New York State Department of Health, which was sent out as a part of the infant-welfare campaign in 1914 with the special purpose of stimulating communities to organize infant-welfare stations in cities and in rural districts, was viewed by 1,300,000 people.

The State boards or departments of health in 32 States reported that lecturers are supplied for talks on general health subjects, including infant hygiene. California, Louisiana, Maryland, Michigan, and Texas have, as a development of general health work, cars with special infant-welfare features.

EXTENSION DIVISIONS OF STATE UNIVERSITIES.

Inquiries concerning the work of extension divisions of State colleges and universities in teaching infant care and hygiene were sent to 72 State institutions enumerated in Table 13 of the report of the Commissioner of Education for the year ended June 30, 1914. Of these, 32 reported no infant-welfare work and 9 made no response to the inquiry. A brief summary of the 31 answers received from the institutions reporting any work of this nature is presented in the following statement:

WORK BY STATE UNIVERSITIES TO PROMOTE INFANT WELFARE.

University of Arkansas, Fayetteville.	Some work in small towns and rural communities by workers in domestic science.
University of California, College of Agriculture, Berkeley.	Exhibit and lectures on flies. Chapter in extension course in Rural Public Health on "The farm baby."
Florida State College for Women, Department of Home Economics, Tallahassee.	Lessons in infant feeding and care of infants in course on home economics. One or two lessons on infant feeding in prize winners' short course to canning-club girls.
University of Idaho, Department of Home Economics, Moscow.	Lectures on infant feeding.
Indiana University, Extension Division, Bloomington.	Traveling exhibit of eight screens of six panels suggesting what any community can do for itself and its children. Child welfare given a place in suggested programs for community institutes.
Purdue University, Department of Agricultural Extension, Home Economics Department, Lafayette, Ind.	Lectures before women's clubs, mothers' club meetings, and farmers' institutes on infant feeding, hygiene of infancy, clothing, and general health subjects. Models of infants' clothing, pictures dealing with infant feeding.
Iowa State College of Agriculture and Mechanic Arts, Home Economics Department, Ames.	Regular lectures on feeding, clothing, and general care of children. Charts on child hygiene. Models of infants' clothing.
State University of Iowa, Extension Division, Iowa City.	Lecturer and child-welfare exhibit sent to communities where baby-health contests and conferences are held and to meetings of child-welfare associations. Physicians recommended for conducting baby health conferences and contests.
Kansas State Agricultural College, Cooperative Extension Work in Agriculture and Home Economics, Manhattan.	No definite infant-welfare work. Infant hygiene touched upon in addresses of the four women lecturers employed by department of home economics.
University of Kansas, Extension Division, Lawrence.	Exhibits showing surveys of Lawrence and Belleville; 200 square feet of wall space. Motion pictures and slides. Lecturers. Literature.

State University of Kentucky, College of Agriculture, Department of Home Economics, Lexington.	Extension work for infant and child welfare in rural communities and small towns through lectures by teaching staff of department of home economics.
Maryland Agricultural College, College Park.	Lectures on infant hygiene and child hygiene at short courses.
University of Michigan, Extension Service, Ann Arbor.	Prenatal care made the subject of several extension lectures.
University of Minnesota, Department of Home Economics, Minneapolis.	Extension courses in home economics which deal with questions of food and nutrition, home management, and infant feeding.
Mississippi Agricultural and Mechanical College, Home Economics Department, post office Agricultural College.	Attention given to infant feeding in connection with lectures and demonstrations.
University of Nebraska, College of Agriculture, Home Economics Division, University Farm, Lincoln.	As a feature of one of the short courses, a part of one afternoon devoted to the care and feeding of children. Illustrative material and a series of charts used:
(Women's Club Department)..	Lectures at farmers' institute meetings and short courses on care of children.
	Outlines on care and feeding of children (including that of infants) sent to women's clubs as a course of study.
University of North Carolina, Department of Rural Economics and Sociology, Chapel Hill.	Prominence given to problems of infant hygiene in suggestions contained in syllabus of county-club home studies.
North Dakota Agricultural College, Extension Division, ¹ post office Agricultural College.	Lectures on infant hygiene, by graduate nurse, in small towns and rural communities.
Ohio State University, Home Economics Department, Columbus.	Infant-welfare work carried on in connection with the "one-week movable schools" for village and farm women. ²
Ohio University, Extension Department, Athens.	Lectures, many of them illustrated, on the subject of home welfare, nursing, and sanitation, with special reference to the child.
Oklahoma Agricultural and Mechanical College, School of Home Economics, Stillwater.	Arranges baby contests.
Oregon Agricultural College, School of Home Economics, Corvallis.	Sessions devoted to child welfare as a feature of farmers' institutes and extension service.
	Lectures at chautauquas on care of infants.
	Extended articles on feeding and care of infants put in hands of country mothers through State Grange.
University of South Carolina, Home Economics Department, Columbia.	Assistance in the establishment of local children's clinics given through lectures. Practical help given at county-fair baby contests.

¹ Organized September, 1915.

² Work organized subsequent to spring of 1915.

Winthrop Normal and Industrial College, Home Economics Department, Rockhill, S. C.	Extension work includes formation of home-keepers' clubs for girls and of mothers' circles for the study of the child. Baby contests and conferences arranged. Demonstrations given of sleeping quarters for the child. Equipment necessary for milk modification and feeding charts shown. Literature distributed.
University of Texas, Department of Extension, Division of Home Welfare, Austin.	Supervision of State baby contest. Organize contests and talks at county fairs on care and feeding of children. Talks on infant welfare in connection with one-week school, county rally, health train, and home-improvement car. Outline on child feeding and care arranged for mothers' study clubs. Publicity work by trained newspaper writer. Exhibit consisting of 40 panels on better babies, 10 on child labor. Models and electrical devices. Motion-picture machines; 500 lantern slides; 30 bulletins on general health subjects.
Utah Agricultural College, Extension Division, Social and Home Economics Associations Department, Logan.	Conducted a housekeepers' conference using as a keynote the subject of child welfare.
University of Utah, Extension Division, Salt Lake City.	Lectures and demonstrations on infant hygiene.
University of Vermont, College of Agriculture, Extension Service, Burlington.	Lectures to farm women and children in extension schools on general hygiene.
West Virginia University, College of Agriculture, Department of Home Economics, Morgantown.	Study courses for farm wives' clubs.
University of Wisconsin, Extension Division and Agricultural College, Home Economics Department, Madison.	Bulletins on infant feeding and hygiene and on diseases of the infant. Extensive publicity work. Health articles printed regularly in 330 newspapers. Community, child-welfare, and women's institutes in which much attention is paid to prenatal and infant care. Exhibit; 125 charts on health; section devoted to children requires 75 square feet of wall space. Models and electrical devices. Five motion-picture films; 1,000 lantern slides. The home-economics course offers instruction by correspondence upon the following topics: Care of the prospective mother; disorders and common ailments of pregnancy, and how to avoid them; miscarriage; preparation for confinement; care in lying-in period; the newborn infant; the nursing mother and the hygiene and general care of the newborn, growth and development of the infant.
University of Wyoming, Agricultural College, Demonstration in Home Economics, Laramie.	Illustrated lectures on child feeding. Work with women's clubs in arranging better-babies contests.

CITIES OF 10,000 POPULATION AND OVER.

Inquiries were sent to health officers in the 599 cities having a population of 10,000 and over according to the census of 1910.¹ No response was received from 44 cities. Of the 555 city health departments replying, 134 reported no work of any character by the departments having a direct bearing on the problem of infant welfare; 255, no infant-welfare work with the exception of city inspection of the milk supply.

The private agencies addressed numbered 448, all of which, with the exception of a few added in the course of the inquiry, were included in the lists supplied to the Children's Bureau.² Repeated requests failed to bring responses from 28 of these agencies.

CITY BUREAUS OR DIVISIONS OF CHILD HYGIENE.

Replies from 20 cities reported distinct divisions or bureaus of child hygiene as branches of the city health departments and supplied the information shown in the accompanying table:

TABLE I.—*Cities having divisions or bureaus of child hygiene as branches of the city health departments.*

City.	Population, 1910.	Title of division.	Year established.
Boston, Mass.....	670, 585	Division of Child Hygiene.....	1911
Buffalo, N. Y.....	423, 715	Bureau of Child Hygiene.....	1910
Chicago, Ill.....	2, 185, 283	Division of Child Hygiene.....	1912
Cincinnati, Ohio.....	363, 561	Child Hygiene Division ¹	1911
Cleveland, Ohio.....	560, 663	Bureau of Child Hygiene.....	1911
		Babies Hospital and Dispensary.....	
Detroit, Mich.....	465, 766	Division of Infant Welfare.....	1909
Duluth, Minn.....	78, 466	Division of Child Welfare.....	1911
Jersey City, N. J.....	267, 779	Division of Child Hygiene.....	1914
Kansas City, Mo.....	248, 381	do.....	1911
Los Angeles, Cal.....	319, 198	Division of Child Welfare.....	1910
Milwaukee, Wis.....	373, 857	Child Welfare Division.....	1912
Montclair, N. J.....	21, 550	Department of Infant Welfare ²	1912
Nashville, Tenn.....	110, 364	Bureau of Infant Welfare.....	1910
New York, N. Y.....	4, 766, 883	Bureau of Child Hygiene.....	1908
Newark, N. J.....	347, 469	Division of Child Hygiene.....	1913
Philadelphia, Pa.....	1, 549, 008	do.....	1910
Pittsburgh, Pa.....	533, 905	Bureau of Child Welfare.....	1914
Providence, R. I.....	224, 326	Division of Child Hygiene.....	1914
Seattle, Wash.....	237, 194	Child Welfare Division ³	1914
Toledo, Ohio.....	168, 497	Division of Child Welfare.....	1915

¹ A subdepartment of the Division of Medical Inspection and Relief.

² Work outlined by the infant-welfare committee of the board of health.

³ Chiefly employed in regulation and improvement of boarding homes for children.

As noted in the table, New York was the first city to establish a separate division of child-welfare work. Detroit was the second city to take this step. Of the eight largest cities in the United States only two—Baltimore and St. Louis—have failed to create a division

¹ In addition the inquiry included South Orange, N. J., with less than 10,000 population, on account of its relation to the general infant-welfare work of the Oranges.

² See p. 7.

specializing in this work. Of the 42 cities in the 100,000 to 500,000 class, 12 have divisions or bureaus of child hygiene; of the 59 cities in the 50,000 to 100,000 class only 1 has such a division; of the 120 cities in the 25,000 to 50,000 class no city has such a division; and of the 372 cities in the 10,000 to 25,000 class only 1 has a division.

DIRECTORY OF INFANT-WELFARE AGENCIES.

The information secured from cities of 10,000 population and over is summarized in General Table 1, as a directory of municipal and private agencies, under the following headings: Infant-welfare stations; instruction by nurses not connected with infant-welfare stations who visit mothers in their own homes and give advice on the care of the baby, home modification of milk, etc.; prenatal work; Little Mothers' Leagues or classes for instructing young girls in infant hygiene; work by nurses for prevention of infant blindness; and city inspection of milk supply. A summary of this table, showing the distribution of certain phases of the work in different parts of the country, is presented in Table II.

TABLE II.—*Infant-welfare work carried on through stations and through nurses not connected with stations, and prenatal work, distributed according to divisions and States, 1915.*

Division and State.	Infant-welfare stations.										Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations.										Prenatal work.		
	Agencies reporting.		Stations.		Nurses.		Dispensing of milk—agencies.				Nurses.				Cities reporting.		Agencies reporting.		Nurses.				
							Dispensing.																
							Summer.		Winter.														
Cities reporting.	Agencies reporting.	Summer.	Winter.	Full time.	Part time.	Total.	Whole milk only.	Modified milk.	Both whole and modified milk.	Not dispensing.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					
United States.....	142	205	539	397	714	152	498	116	110	60	1	49	95	198	259	406	460	122	491	186	286	45	893
New England.....	29	34	76	51	97	23	57	9	23	7	.....	16	11	62	62	55	74	38	75	43	51	12	108
Maine.....	1	1	1	1	1	.....	1	.....	1	.....	.....	1	.....	1	1	.....	1	.....	1	1	2	.....	2
New Hampshire.....	1	2	4	1	8	1	6	.....	2	1	.....	1	.....	5	6	.....	5	.....	9	3	3	1	3
Vermont.....	1	1	1	1	2	.....	2	.....	.....	.....	.....	.....	.....	1	1	.....	1	.....	1	.....	.....	.....	.....
Massachusetts.....	14	17	50	32	55	15	31	8	13	3	2	10	4	31	42	38	48	34	45	25	31	10	64
Rhode Island.....	4	5	9	9	17	4	11	4	7	.....	.....	5	5	3	3	5	5	6	5	6	7	.....	15
Connecticut.....	8	8	11	7	14	3	6	4	7	3	.....	4	1	11	10	17	14	4	14	8	8	1	24
Middle Atlantic.....	53	93	252	174	323	57	203	55	42	25	1	16	51	53	86	234	155	19	171	52	114	18	347
New York.....	33	53	176	121	236	20	135	17	23	18	.....	5	30	27	48	218	125	8	142	23	54	14	243
New Jersey.....	13	15	21	18	15	23	10	8	8	1	.....	7	7	11	13	3	11	1	10	14	17	.....	26
Pennsylvania.....	7	25	55	35	72	14	53	28	11	6	1	4	14	15	25	13	19	10	19	15	43	4	78
East North Central.....	27	36	117	90	181	36	144	29	19	11	.....	8	17	41	52	166	153	49	158	40	57	8	290
Ohio.....	10	13	48	32	85	24	66	21	8	5	.....	3	5	11	15	8	64	8	64	15	20	4	137
Indiana.....	6	7	16	9	12	9	7	4	5	3	.....	2	2	6	7	2	1	2	5	7	7	.....	12
Illinois.....	5	8	31	30	47	2	38	3	8	1	.....	2	5	4	7	93	69	4	69	6	10	1	80
Michigan.....	5	5	15	15	22	1	18	1	2	2	.....	1	5	10	13	11	33	11	33	11	9	3	56
Wisconsin.....	1	1	7	4	15	.....	15	15	1	.....	.....	.....	.....	11	13	6	8	3	12	5	7	.....	5

	5	5	12	11	25	18	2	2	3	2	2	1	1	1	5	6	2	9
East South Central.....																		
Kentucky.....	2	3	6	5	9	8	1	1	1	1	1	1	1	1	1	3	1	1
Tennessee.....	3	3	6	6	16	10	1	1	1	1	1	1	1	1	1	3	1	1
Alabama.....																1	1	1
Mississippi.....																		
West South Central.....	4	5	4	4	11	11	3	3	2	5	5	1	5	1	5	4	5	13
Arkansas.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Louisiana.....	1	1			6	6	1	1		2	2				1	1	1	6
Oklahoma.....							1	1	2	2	2	1	2	1	2	2	3	6
Texas.....	2	3	3	3	4	4	1	1	2	2	2	1	2	1	2	2	3	6
Mountain.....	1	1	5	1	6		1	1		2	2		7		7	2	2	7
Montana.....																		
Idaho.....										1	1					1	1	
Wyoming.....																		
Colorado.....										1	1		7		7	1	1	7
New Mexico.....																		
Arizona.....																		
Utah.....	1	1	5	1	6		1	1										
Nevada.....																		
Pacific.....	5	5	11	11	13	3	2	1	1	3	8	9	12		12	9	10	11
Washington.....	1	1	1	1	1	1				1	4	5	5		5	2	2	2
Oregon.....						6	2	1							7	7	8	9
California.....	4	4	10	10	12	3	3		1	2	4	4					1	

INFANT-WELFARE STATIONS.

The establishments included under infant-welfare stations may be described under four headings: (1) Infant-welfare stations, which do not dispense milk but to which mothers may bring their babies for examination by doctors or nurses and which send nurses into the homes to instruct mothers in the care of the baby, home modification of milk, etc. (2) Milk stations, where a good quality of milk is dispensed, either free or at the prevailing price, for the use of mothers who are unable to nurse their babies. Other activities usually correspond with those of the infant-welfare station. (3) Feeding clinics, established by certain hospitals. It is to be noted that hospital clinics for sick babies are not included. (4) Health centers, which carry on educational work in a prescribed neighborhood and which deal with health and other problems affecting not only the baby but the entire family.

Number of cities represented.—The total number of cities represented in the reports received from agencies maintaining infant-welfare or milk stations is 142; the number of agencies, 205. Of the cities 53, with 93 agencies, are situated in the Middle Atlantic division, 33 of the cities and 53 of the agencies being in New York State. The New England division is represented by 29 cities and 34 agencies, with 14 cities and 17 agencies in Massachusetts, and the East North Central division by 27 cities and 36 agencies, with 10 cities and 13 agencies in Ohio.

Number of stations.—Reports were received from 205 agencies, maintaining 539 infant-welfare stations in 142 cities of 10,000 population and over. Of these stations only 397 were reported as operated in the winter. According to the inquiry the Middle Atlantic is far ahead of other divisions in the total number of stations maintained (252), and, as shown in Table V, in the number of stations reported by municipal agencies or by municipal in cooperation with private agencies (134) and by private agencies (118). Even if the stations maintained in New York City are eliminated, the statements still give the first place to the Middle Atlantic division.

Milk dispensed.—Replies received from the 205 agencies maintaining infant-welfare stations in 142 cities indicate that milk is dispensed by slightly more than one-half (110) of the agencies. Of these agencies 49 dispense both whole and modified milk, 60 whole milk only, and 1 modified milk only. In the stations of 95 agencies no milk is dispensed.

Nurses attached to stations.—Nurses who work with infant-welfare stations as headquarters, giving all or a portion of their time, number 866 in summer but only 604 in winter. Of the nurses employed in summer nearly one-half (404) are employed in stations

maintained by cities or by cities in cooperation with private agencies. The work is concentrated in the Middle Atlantic division with 380 nurses, of whom 256 are in New York State, including 165 in New York City.

INSTRUCTION BY NURSES NOT CONNECTED WITH INFANT-WELFARE STATIONS.

The figures in the preceding paragraph taken by themselves do not present a complete statement of infant-welfare nursing work. To obtain this it is necessary to add the nurses who are not connected with the work of a station but who visit mothers in their own homes and instruct them in the care of babies, in the modification of milk, etc. The figures shown in the tables for the number of nurses who give a portion of their time to such work are doubtless too small. At the present time a complete report would probably include workers in nearly every visiting-nurse association in the country. No attempt was made to carry on an exhaustive inquiry to bring out this information. The bureau addressed only those agencies which there was some reason to believe specialized in infant-welfare work.¹

Agencies reporting nurses not connected with infant-welfare or milk stations doing educational work among mothers in their own homes were found in 198 cities. This number should not be added to the cities reporting stations in order to get the total number of cities having infant-welfare work, because many cities have both classes of work. The total number of cities reported as carrying on infant-welfare work, by municipal or private agency, either through stations or through nurses not connected with stations who visit mothers in their homes, is 287.

Of these nurses not connected with stations, 466 are reported as giving their entire time in summer to infant-welfare work, but only 122 as giving their entire time in winter. In addition, 460 visiting nurses, according to the table, do a certain amount of educational work in summer among mothers as a distinct branch of their routine, and 491 do similar work in winter. Thus altogether 926 infant-welfare nurses are employed in summer and 613 in winter. That the number of part-time nurses is greater in winter than in summer is accounted for by the fact that many nurses are attached to stations operated only during the summer. In winter their work may be described under the other heading, and this of course swells the total for the winter part-time nurses.

¹ See p. 7.

PRENATAL WORK.

The term "prenatal work" as used in this report refers to the care and instruction of prospective mothers in the hygiene of pregnancy by doctors and nurses attached to infant-welfare stations and obstetrical clinics and by nurses not attached to stations who visit mothers in their own homes. In collecting the information presented no attempt was made to address all hospitals and obstetrical clinics; the inquiry included only those institutions to which reference was made in the original sources of information.¹

Cities and agencies reporting.—The number of cities reporting prenatal work as carried on by departments of health or by private agencies is 186. All sections of the country are represented. The Middle Atlantic division shows 52 cities reporting prenatal work, 23 of them being in New York State; the New England division reports 43, with 25 in Massachusetts; the East North Central division, 40; the West North Central, 18; and each of the other divisions less than 15.

Of the 286 agencies reporting this work, 114 are in the Middle Atlantic division, 57 in the East North Central, 51 in New England, 23 in the West North Central, and less than 20 in each of the other divisions.

Nurses.—According to the table, 45 nurses give their entire time to prenatal work, 13 being employed by boards of health.² Among the States, New York reports 14, Massachusetts 10. Although comparatively few nurses give their entire time to prenatal work, the fact that 893 give a portion of their time to this work is significant and indicates a growing disposition to include systematic prenatal work as a feature of the activities of the stations and of the agencies sending nurses into the homes.

Obstetrical clinics.—In some cases an obstetrical clinic employs nurses to do prenatal work; in others, agencies carrying on prenatal work establish clinics for the medical care of pregnant women; in others, again, such agencies work in cooperation with clinics. Of the 286 agencies reporting prenatal work by nurses, 59 report that they support obstetrical clinics.

LITTLE MOTHERS' LEAGUES OR CLASSES FOR INSTRUCTING YOUNG GIRLS IN INFANT HYGIENE.

Under this title are included classes in infant hygiene for girls of school age either as a feature of the school curriculum or as an activity carried on outside school hours by the health authorities or by some private agency. In response to this inquiry 44 cities of 10,000 population and over reported that classes for Little Mothers had been organized by municipal agencies. The information is presented in Table III.

¹ See p. 7.² Table V, p. 27.

TABLE III.—*Little Mothers' Leagues or classes for instructing young girls in infant hygiene, conducted by municipal agencies in cities having a population in 1910 of 10,000 and over, 1915.*

[Sign (X) signifies that some work is being done in the field indicated.]

State and city.	Number of girls instructed annually.	Instruction given by—		Badges worn.	Classes.		
		Lectures.	Demonstrations.		In schools.		Elsewhere.
					During school hours.	Out-side of school hours.	
California:							
Los Angeles.....	100	×	×		×		
Connecticut:							
Bridgeport ¹							
Hartford.....	500	×	×				Playgrounds.
District of Columbia:							
Washington.....	120	×	×				Model flats.
Illinois:							
Chicago.....	4,000	×	×	×	×		
La Salle, Peru, and Oglesby, Hygienic Institute, Department of Health.	180	×	×		×	×	
Indiana:							
Gary ¹							
Kansas:							
Topeka ²							
Massachusetts:							
Holyoke ³							
Northampton.....	(⁴)	×	×		×		
Springfield.....	100	×	×	×	×		
Michigan:							
Detroit.....	472	×	×	×		×	
Minnesota:							
Duluth.....	20	×	×			×	
Missouri:							
Kansas City.....	(⁵)	×	×			×	
New Jersey:							
Hackensack ⁶							
Newark.....	100	×	×			×	
Orange.....	35		×				Weighing station and health department laboratory.
Pasadena.....	1,500	×	×	×	×	×	Playgrounds.
New York:							
Buffalo.....	(⁶)	×	×	×	×		
Dunkirk.....	200	×			×		
Jamestown ¹							
New York.....	17,638	×	×	×		×	Playgrounds, infant-welfare stations, and settlement houses.
Ogdensburg ¹							
Olean ⁷							
Poughkeepsie.....	126	×	×	×			Child-welfare station.
Rochester.....	450	×	×	×	×	×	
Schenectady.....	50	×	×		×	×	
Utica ¹							
Yonkers ²	997	×	×	×		×	
Ohio:							
Alliance ¹							
Cincinnati.....	1,110	×	×	×	×	×	
Cleveland ³	2,500	×	×		×		
Elyria ¹							
Oklahoma:							
Enid ¹							

¹ Details not supplied.² Details not supplied; cooperates with Topeka Public Health Nursing Assn.³ Details not supplied; cooperates with Holyoke Infant Hygiene Assn.⁴ Number not supplied.⁵ Details not supplied; cooperates with Children's Relief and General Welfare Society.⁶ Approximately.⁷ Details not supplied; cooperates with Olean Visiting Nurse Assn.⁸ Cooperates with Milk Committee.⁹ Cooperates with Babies' Dispensary and Hospital.

TABLE III.—*Little Mothers' Leagues or classes for instructing young girls in infant hygiene, conducted by municipal agencies in cities having a population in 1910 of 10,000 and over, 1915—Continued.*

[Sign (X) signifies that some work is being done in the field indicated.]

State and city.	Num- ber of girls in- struct- ed an- nually.	Instruction given by—		Badges worn.	Classes.		
		Lec- tures.	Demon- stra- tions.		In schools.		Elsewhere.
					During school hours.	Out- side of school hours.	
Pennsylvania:							
Philadelphia.....	9,906	x	x	x	-----	x	Milk stations.
Pittsburgh.....	3,000	x	x	x	-----		
Reading.....	93	x	x		x		
Rhode Island:							
Providence.....	36	x	x		x		
South Dakota:							
Aberdeen ¹							
Tennessee:							
Nashville ¹							
Utah:							
Salt Lake City ¹							
Virginia:							
Norfolk ²							
Wisconsin:							
La Crosse ³							
Milwaukee.....	5,242	x	x			x	

¹ Details not supplied.² Details not supplied; cooperates with King's Daughters Visiting Nurse Assn.³ Details not supplied; cooperates with Associated Charities of La Crosse.

The number of young girls instructed annually is given as 48,475. Chicago reports 4,000 of these; New York, 17,638; Philadelphia, 9,906; Pittsburgh, 3,000; Milwaukee, 5,242. In 12 cities a distinctive badge is supplied, either free or for a small sum, to the girls in these classes or clubs.

In addition, the following private agencies reported some work under the heading of Little Mothers' Leagues or classes:

State and city.	Agency.
Alabama:	
Clanton.....	Chilton County Health Committee. ¹
California:	
Oakland.....	Baby Hospital of Alameda County.
Connecticut:	
Hartford.....	Visiting Nurse Association.
Litchfield.....	District Nursing Association. ¹
Middletown.....	{ District Nurse Association.
	{ Social Service League.
New Haven.....	Visiting Nurse Association.
District of Columbia:	
Washington.....	Washington Diet Kitchen Association.
Florida:	
Jacksonville.....	Infant Welfare Society.
Illinois:	
Chicago.....	Mary Crane Day Nursery.
Moline.....	King's Daughters, visiting nurse department.

¹ Affiliated with American Red Cross Town and Country Nursing Service.

State and city.	Agency.
Indiana:	
South Bend.....	Children's Free Dispensary and Hospital.
Kansas:	
Lawrence.....	Social Service League.
Kentucky:	
Paducah.....	Settlement House. ¹
Louisiana:	
New Orleans.....	Child Welfare Association.
Maine:	
Portland.....	Edward Mason Dispensary, milk station.
Massachusetts:	
Boston.....	Denison House, Boston College Settlement. Lincoln House. Milk and Baby Hygiene Association.
Fall River.....	District Nursing Association.
Gloucester.....	Gloucester District Nursing Association.
Leicester.....	Leicester Samaritan Association.
Lowell.....	Lowell Guild.
Lynn.....	Day Nursery Association (baby clinic).
North Adams.....	Visiting Nurse Aid Association.
Swampscott.....	Swampscott Visiting Nurse Association.
Waltham.....	Waltham District Nursing Association.
Minnesota:	
Duluth.....	Scottish Rite Masons, infant-welfare department.
St. Paul.....	St. Paul Baby Welfare Association.
Missouri:	
St. Joseph.....	Baby Welfare Association.
Nebraska:	
Lincoln.....	Charity Organization Society.
New Jersey:	
Camden.....	Visiting Nurse Society.
Jersey City.....	Child Welfare Association.
Long Branch.....	Long Branch Visiting Nurse Association.
Madison.....	Town Improvement Settlement House.
Morristown.....	Central Bureau of Social Service. Neighborhood House Association.
Orange.....	Diet Kitchen of the Oranges. Visiting Nurses' Association of Orange and West Orange.
South Orange.....	Society for Lending Comforts to the Sick.
New York:	
Albany.....	Central Christian Mothers Union.
Buffalo.....	District Nursing Association.
Cohoes.....	State Charities Aid Association, Cohoes Committee on Prevention of Tuberculosis.
Glens Falls.....	Child Welfare Committee.
Ithaca.....	Visiting Nurse Association. Ithaca Tuberculosis Committee.
New York.....	New York Association for Improving the Condition of the Poor. Sunnyside Day Nursery.
Purchase.....	Purchase Visiting Nurse Association. ¹
Syracuse.....	Infant Welfare Association.
Utica.....	Baby Welfare Committee of Utica.
Watertown.....	{ Bureau of Charities and Society for Prevention of Cruelty to Children. Visiting Nurse Association.

¹ Affiliated with American Red Cross Town and Country Nursing Service.

State and city.	Agency.
Ohio:	
Akron.....	George T. Perkins Visiting Nurse Association.
Cincinnati.....	Union Bethel Settlement.
Columbus.....	Instructive District Nursing Association.
Pennsylvania:	
Butler.....	Women's Industrial Club.
Easton.....	St. John's Lutheran Church.
Erie.....	Visiting Nurse Association.
Johnstown.....	Associated Charities of Greater Johnstown.
Lebanon.....	Visiting Nurse Association.
Meadville.....	Visiting Nurse Association.
Palmerton.....	New Jersey Zinc Co. (of Pennsylvania). ¹
Philadelphia.....	Baptist Settlement House.
	Child Federation.
	Children's Homeopathic Hospital.
	Cohocksink Mothers' Club.
	Mt. Sinai Hospital.
	Osteopathic Society.
Wilkes-Barre.....	Visiting Nurse Association.
Texas:	
Houston.....	Houston Settlement Association.
	Social Service Federation.
Virginia:	
Hot Springs.....	Hot Springs Valley Nursing Association. ¹
Leesburg.....	Lena Morton Memorial Nurse.
Washington:	
Mount Vernon.....	Skagit County public health nurse.
Wisconsin:	
Neenah and Menasha.....	Visiting Nurse Association of Neenah and Menasha.
Two Rivers.....	Ladies Charitable Association.

WORK FOR PREVENTION OF INFANT BLINDNESS.

The statements shown in General Table 1 concerning the prevention of infant blindness relate solely to work by nurses. Such work was reported by 181 cities as carried on by 251 agencies.

General Table 4, on page 106, is a Summary of State Laws and Rulings Relating to the Prevention of Blindness from Babies' Sore Eyes, founded on a statement published by the National Committee for the Prevention of Blindness and revised to include the laws of 1915.

MILK INSPECTION.

Inquiries covering country milk inspection, the scoring of dairies and stores selling milk, score cards employed, enforcement of bacteriological standards, and pasteurization ordinances were sent to all cities and towns having a population in 1910 of 10,000 and over. Of the 599 cities, 410 replied that milk inspection was carried on. Only 298 of these, however, supplemented this statement by returning the special schedule calling for detailed information. The tabulation of the information from these special schedules is presented in General Table 3, page 100.

¹ Affiliated with American Red Cross Town and Country Nursing Service.

Of the 298 cities represented, all except 58 reported country milk inspection. Dairies are scored in 228 cities and stores selling milk in 98. The card used by the Department of Agriculture, or a modification of that card, has been adopted in 146 cities; a bacteriological standard is enforced in 176 cities; a pasteurization ordinance is reported by only 43 cities.

HOSPITALS AND DISPENSARIES.

As explained elsewhere, this report deals with the infant-welfare and prenatal work of hospitals and dispensaries only so far as such work relates to the instruction of mothers and expectant mothers in infant hygiene and in the hygiene of pregnancy and to follow-up work by hospital nurses in keeping under observation babies who have left the hospital. No attempt was made to address all hospitals in the United States in order to bring out this information; the inquiry included, as in other cases, only those institutions to which reference was made in the original sources of information,¹ with a few institutions added in the course of correspondence.

COOPERATION BETWEEN AGENCIES.

It has been found impossible to present information in such a way as to show the minute points of cooperation between the different private agencies engaged in infant-welfare work and between such agencies and city health departments. In the larger cities and in many of the smaller ones the health departments cooperate freely with all organizations having work in any way touching on the problem of infant mortality. Obviously in a statistical statement an attempt to describe such cooperation would not be practicable. But where the information available has pointed to definite phases of cooperation, such phases, as far as possible, have been indicated.

CITIES IN DIFFERENT CLASSES.

Table IV shows the distribution of certain phases of infant-welfare work in cities of different population groups. It includes, in addition to the cities represented in other tables, a group of places having a population in 1910 of less than 10,000² and thus gives some idea of the growth of the work in smaller communities. The information concerning this last group has been gained more or less incidentally rather than by an exhaustive inquiry and does not by any means cover all infant-welfare work in the smaller places. It has a certain significance, however, as showing the tendency to include the instruction of mothers and prospective mothers in infant hygiene as a part of general nursing work.

¹ See p. 7.

² For list of cities see General Table 2, p. 96.

TABLE IV.—*Infant-welfare work carried on through stations and through nurses, giving part or full time, not connected with stations, by municipal and private agencies, distributed according to population groups and divisions, 1915.*

Population group and division.	Infant-welfare stations.				Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations.				Prenatal work.		
	Stations operated by—		Nurses employed by—		Cities reporting.	Nurses employed by—		Cities reporting.	Municipal agency alone or co-operating with private agency.	Private agency.	Total.
	Cities reporting.	Municipal agency alone or co-operating with private agency.	Private agency.	Municipal agency alone or co-operating with private agency.		Municipal agency alone or co-operating with private agency.	Private agency.				
United States.....	154	246	305	406	471	288	472	590	266	281	747
Cities having a population of—											
500,000 and over.....	8	109	129	194	151	6	306	215	8	144	268
100,000 to 500,000.....	23	84	78	141	141	19	72	91	36	70	188
50,000 to 100,000.....	34	20	46	29	97	26	15	40	30	16	68
25,000 to 50,000.....	27	18	19	20	32	45	39	53	36	17	53
10,000 to 25,000.....	40	13	23	20	42	108	37	87	76	32	88
Under 10,000.....	12	2	10	2	8	90	1	104	80	2	88
New England.....	31	17	61	16	108	87	55	120	69	23	123
500,000 and over.....	1	.....	14	.....	20	1	15	10	1	15	13
100,000 to 500,000.....	7	10	22	9	30	4	17	3	6	.....	30
50,000 to 100,000.....	9	5	15	3	39	7	5	16	9	1	19
25,000 to 50,000.....	5	2	3	4	10	13	10	20	8	2	8
10,000 to 25,000.....	7	.....	5	.....	6	27	8	31	19	5	27
Under 10,000.....	2	.....	2	.....	3	35	.....	40	26	.....	26
Middle Atlantic.....	61	126	124	221	164	73	286	192	72	139	266
500,000 and over.....	3	90	68	147	83	2	200	92	3	91	117
100,000 to 500,000.....	6	20	14	43	21	2	13	18	6	24	37
50,000 to 100,000.....	12	5	18	6	30	11	5	10	12	4	27
25,000 to 50,000.....	11	11	7	12	8	10	6	19	10	5	25
10,000 to 25,000.....	21	8	11	11	19	28	12	22	21	14	29
Under 10,000.....	8	2	6	2	3	20	.....	31	20	1	29
East North Central.....	29	64	55	121	98	50	141	188	50	80	229
500,000 and over.....	2	19	23	47	27	2	83	111	2	38	110
100,000 to 500,000.....	8	38	17	64	41	4	30	36	3	30	71
50,000 to 100,000.....	4	.....	5	.....	12	1	.....	9	1	.....	7
25,000 to 50,000.....	4	2	4	1	8	11	13	7	10	.....	17
10,000 to 25,000.....	12	.....	4	.....	2	28	.....	16	20	.....	20
Under 10,000.....	2	.....	2	.....	3	9	.....	10	10	.....	11

	12	10	27	8	43	20	13	27	21	10	50
West North Central											
500,000 and over	1	6	11	1	7	1		8	1		13
100,000 to 500,000	4	6	10	1	20	1		8	3		15
50,000 to 100,000	3	3	8	6	7	2	1	6	6	3	6
25,000 to 50,000	3	2	2	2	7	6	6	6	6	5	9
10,000 to 25,000	1		1		1	8	4	8	5	1	6
Under 10,000						3	1	2	3	1	2
South Atlantic											
500,000 and over	6	2	23	9	31	32	19	36	27	15	53
100,000 to 500,000	1		13		14	3		2	1		16
50,000 to 100,000	3	2	7	9	12	3	9	16	3	5	18
25,000 to 50,000			2		4	1	2		8	3	3
10,000 to 25,000	1		1		1	10	5	5	7	2	15
Under 10,000						14		13	14		3
East South Central											
500,000 and over	5	5	7	15	10	8		8	10	7	9
100,000 to 500,000											
50,000 to 100,000	3	5	5	15	8	1		1	4	7	3
25,000 to 50,000	2		2		2	1			1		
10,000 to 25,000						1		1	1		1
Under 10,000	4	1	3	1	11	5	3	3	4	1	12
West South Central											
500,000 and over	1										6
100,000 to 500,000	2	1	3		5	2	1	2	2		6
50,000 to 100,000	1	1		1		1	1	1	1	1	
25,000 to 50,000											
10,000 to 25,000											
Under 10,000											
Mountain											
500,000 and over	1	5		6		3		8	3		8
100,000 to 500,000											
50,000 to 100,000											
25,000 to 50,000											
10,000 to 25,000											
Under 10,000											
Pacific											
500,000 and over	5	6	5	9	7	10	6	8	10	6	7
100,000 to 500,000											
50,000 to 100,000	3	6	3	9	3	3	3	2	6	4	3
25,000 to 50,000	1		1		1	1	1		1		1
10,000 to 25,000	1				3	4	2	4	2	2	2
Under 10,000						2		2	1		1

¹ Totals in this table do not check with those in Tables II and V, in which only cities of 10,000 population and over are included.

In spite of the spread of baby-saving activities in the past few years, 238 or 43 per cent of the 551 infant-welfare stations, together with 345 or 39 per cent of the 877 station nurses, and 523 or 49 per cent of the 1,062 nurses not connected with station work, are found to be concentrated in the eight cities of over 500,000, representing a total population of 11,511,841. Of the nurses who devote at least a portion of their time to prenatal work, 40 per cent are working in these eight large cities; but the figures show that agencies in other groups of cities as well are not neglecting this important phase of infant-welfare work.

COMPARISON OF WORK BY MUNICIPAL AND PRIVATE AGENCIES.

The agency by which the work is carried on may be the municipality, either alone or in cooperation with a private agency, or an exclusively private agency. According to the reports, infant-welfare work is carried on by municipalities or private agencies through infant-welfare stations or through instruction of mothers in their homes by nurses in 287 cities of over 10,000 population. The number of cities in which some work of this character is done by the municipality or by the municipality in cooperation with some private agency is 149. Infant-welfare stations are operated by the municipalities in 60 cities; instruction of mothers in their homes is carried on by the municipal nurses in 100 cities; prenatal work is carried on by the municipal nurses in 63 cities. The total number of cities in which work is carried on by private agencies is 254.

It is found that for the country as a whole only in one group—cities having a population of between 100,000 and 500,000—does the number of stations maintained by cities or by cities in cooperation with private agencies exceed the number maintained by private agencies alone. The city stations, however, in two groups—the 500,000 and over and the 100,000 to 500,000—maintain as large a staff of nurses as the private agencies. Of the nurses not connected with station work who visit mothers in their homes, the number maintained by municipal or by municipal in cooperation with private agencies in the eight cities of 500,000 population and over is found to be much larger than that employed by private agencies. This is partly due to the employment of school nurses in summer in infant-welfare work.

With the exceptions noted, private agencies in all the different population groups outclass municipal agencies in the number of stations and in the number of nurses in station work and of those not connected with stations. The same thing is true in nearly all sections of the country and in nearly all population groups, with the exception of some of the groups in the Middle Atlantic division, the East North Central, and one group in the Pacific division.

A comparison in detail of infant-welfare work by municipal and by private agencies, and by municipal cooperating with private agencies, in cities of 10,000 population and over is shown in Table V.

TABLE V.—*Infant-welfare work carried on through stations and through nurses not connected with stations, and prenatal work, distributed according to character of agencies and divisions, 1915.*

Character of agency and division.	Infant-welfare stations.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work—Number of nurses.	
	Number.		Nurses.				Summer.		Winter.		Full time.	Part time.
	Sum-mer.	Win-ter.	Summer.		Winter.		Full time.	Part time.	Full time.	Part time.		
			Full time.	Part time.	Full time.	Part time.						
United States.....	539	397	714	152	488	116	466	460	122	491	45	893
Municipal.....	181	117	283	20	140	27	371	56	39	63	13	179
Private.....	295	235	342	120	277	79	74	391	70	408	31	628
Cooperating.....	63	45	89	12	71	10	21	13	13	20	1	86
New England.....	76	51	97	23	57	9	55	74	38	75	12	108
Municipal.....	6		8	3	2		35	10	22	6		17
Private.....	59	43	84	20	53	9	17	59	13	63	11	86
Cooperating.....	11	8	5		2		3	5	3	6	1	5
Middle Atlantic.....	252	174	323	57	203	55	234	155	19	171	18	347
Municipal.....	124	84	190	14	95	24	216	13	2	23	11	124
Private.....	118	84	121	40	102	30	18	141	15	143	7	220
Cooperating.....	10	6	12	3	6	1		1	2	5		3
East North Central.....	117	90	181	36	144	29	166	153	49	158	8	290
Municipal.....	37	15	51	1	28		117	7	11	8	2	16
Private.....	53	47	65	31	58	25	34	144	35	145	6	212
Cooperating.....	37	28	65	4	58	4	15	2	3	5		62
West North Central.....	37	30	32	18	23	7	5	15	11	24	1	56
Municipal.....	8	6	4	2	3	2		5		5		4
Private.....	27	24	26	16	20	5	2	9	6	19	1	47
Cooperating.....	2		2				3	1	5			5
South Atlantic.....	25	25	26	14	25	11	4	38	4	38	3	52
Municipal.....							2	14	3	14		6
Private.....	23	23	22	9	21	6	2	21	1	21	3	37
Cooperating.....	2	2	4	5	4	5		3		3		9
East South Central.....	12	11	25		18		1	1		1	2	9
Municipal.....	5	5	15		9							7
Private.....	7	6	10		9		1	1		1	2	2
Cooperating.....												
West South Central.....	4	4	11	1	11	1	1	5	1	5		13
Municipal.....	3	3	10	1	10	1	1	2	1	2		12
Private.....	1	1	1		1			3		3		1
Cooperating.....												
Mountain.....	5	1	6			1		7		7		7
Municipal.....	5	1	6			1						
Private.....								7		7		7
Cooperating.....												
Pacific.....	11	11	13	3	7	3		12		12	1	11
Municipal.....	6	6	9		3			5		5		5
Private.....	5	5	4	3	4	3		6		6	1	5
Cooperating.....								1		1		1

GENERAL TABLES.

EXPLANATORY NOTE.—Absence of entry in any of the columns indicates that a positive statement has been received that at the time of the inquiry no infant-welfare work was being carried on.

Reference to a footnote "No information supplied," indicates that no response has been received to the Children's Bureau inquiries.

Reference to a footnote "Work reported. Detailed information not available," indicates that the agency stated upon the preliminary schedule that some work was carried on but did not fill out the supplemental schedules asking for detailed information.

TABLE 1.—*Infant-welfare work by municipal and private agencies in*

[Sign (x) signifies that some work is

			Infant-welfare stations.							
State and city.	Agency.	Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.				
		Summer.	Winter.			Sum-mer.		Win-ter.		
						Full time.	Part time.	Full time.	Part time.	
ALABAMA.										
1 Anniston.....	Municipal.....									
2 Bessemer.....	do. ¹									
3 Birmingham.....	do.....									
4	Infant Welfare Assn., 1622 S. Thirteenth St.									
5 Gadsden.....	Municipal.....									
6 Mobile.....	do.....									
7 Montgomery.....	do.....									
8 Selma.....	do. ¹									
ARIZONA.										
9 Phoenix.....	Municipal.....									
10 Tucson.....	do.....									
ARKANSAS.										
11 Argenta.....	Municipal.....									
12 Fort Smith.....	do. ¹									
13 Hot Springs.....	do. ¹									
14 Little Rock.....	do.....									
15	United Charities Assn., City Hall.....	1	1	286	5	1		1		
16	Metropolitan Life Insurance Co., State Bank Building.									
17 Pine Bluff.....	Municipal.....									
18 Texarkana ²	do.....									
CALIFORNIA.										
19 Alameda.....	Municipal.....									
20 Bakersfield.....	do.....									
21 Berkeley.....	do.....									
22	Berkeley Dispensary, ³ 954 University St.	1	1		1	1		1		
23 Eureka.....	Municipal.....									
24 Fresno.....	do.....									
25 Long Beach.....	do.....									
26 Los Angeles.....	Municipal (division of child welfare).....	6	6	400	6	9		3		
27 Oakland.....	Municipal.....									
28	Baby Hospital of Alameda County, 5105 Dover St.	2	2	450	20	2		2		
29 Pasadena.....	Municipal.....									
30 Pomona.....	do.....									
31 Redlands.....	do.....									
32	Associated Charities, room 5, City Hall.									
33 Riverside.....	Municipal.....									
34 Sacramento.....	do.....									
35 San Bernardino.....	do.....									
36 San Diego.....	do. ¹									
37 San Francisco.....	do.....									
38	University of California Hospital Dispensary, Second and Parnassus Aves.									
39	Certified Milk and Baby Hygiene Committee (Assn. of Collegiate Alumnae). ¹									

¹ No information supplied.² Under 10,000 population. Joint population of Texarkana, Ark., and Texarkana, Tex., 15,445.³ Overhead expenses included in city tax budget. City health department and Certified Milk and Baby Hygiene Committee, Association of Collegiate Alumnae, cooperate.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

41

cities and towns having a population in 1910 of 10,000 and over, 1915.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					Supporting an obstetrical clinic.
By doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.				
							1				1			×	×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
															×
												</			

* For period of approximately 6 months.

* City furnishes supplies for clinic of Dispensary of University of Southern California.

* Limited.

* All nurses in training school have 6 weeks prenatal nursing.

TABLE 1.—*Infant-welfare work by municipal and private agencies in*

(Sign (X) signifies that some work is

		Infant-welfare stations.									
State and city.		Agency.	Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.				
			Summer.	Winter.			Sum-mer.		Winter.		
								Full time.	Part time.	Full time.	Part time.
ALABAMA.											
1	Anniston.....	Municipal.....									
2	Bessemer.....	do.....									
3	Birmingham.....	do.....									
4		Infant Welfare Assn., 1622 S. Thirteenth St.									
5	Gadsden.....	Municipal.....									
6	Mobile.....	do.....									
7	Montgomery.....	do.....									
8	Selma.....	do. ¹									
ARIZONA.											
9	Phoenix.....	Municipal.....									
10	Tucson.....	do.....									
ARKANSAS.											
11	Argenta.....	Municipal.....									
12	Fort Smith.....	do. ¹									
13	Hot Springs.....	do. ¹									
14	Little Rock.....	do.....									
15		United Charities Assn., City Hall.....	1	1	286	5	1			1	
16		Metropolitan Life Insurance Co., State Bank Building.									
17	Pine Bluff.....	Municipal.....									
18	Texarkana ²	do.....									
CALIFORNIA.											
19	Alameda.....	Municipal.....									
20	Bakersfield.....	do.....									
21	Berkeley.....	do.....									
22		Berkeley Dispensary, ³ 954 University St.	1	1		1	1			1	
23	Eureka.....	Municipal.....									
24	Fresno.....	do.....									
25	Long Beach.....	do.....									
26	Los Angeles.....	Municipal (division of child welfare).....	6	6	400	6	9			3	
27	Oakland.....	Municipal.....									
28		Baby Hospital of Alameda County, 5105 Dover St.	2	2	450	20	2			2	
29	Pasadena.....	Municipal.....									
30	Pomona.....	do.....									
31	Redlands.....	do.....									
32		Associated Charities, room 5, City Hall.									
33	Riverside.....	Municipal.....									
34	Sacramento.....	do.....									
35	San Bernardino.....	do.....									
36	San Diego.....	do. ¹									
37	San Francisco.....	do.....									
38		University of California Hospital Dispensary, Second and Parnassus Aves.									
39		Certified Milk and Baby Hygiene Committee (Assn. of Collegiate Alumnae). ¹									

¹ No information supplied.² Under 10,000 population. Joint population of Texarkana, Ark., and Texarkana, Tex., 15,445.³ Overhead expenses included in city tax budget. City health department and Certified Milk and Baby Hygiene Committee, Association of Collegiate Alumnae, cooperate.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

cities and towns having a population in 1910 of 10,000 and over, 1915.

being done in the field designated.]

[illegible]

⁴ For period of approximately 6 months.

* City furnishes supplies for clinic of Dispensary of University of Southern California.

• Limited.

⁷ All nurses in training school have 6 weeks prenatal nursing.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

State and city.	Agency.	Infant-welfare stations.							
		Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
		Summer.	Winter.			Summer.		Winter.	
						Fulltime.	Parttime.	Fulltime.	Parttime.
CALIFORNIA—contd.									
1 San Jose.....	Municipal.....								
2 Santa Barbara.....	do.....								
3 Visiting Nurse Assn., 133 E. Haley St.		11	11	102	(?)		3		3
4 Santa Cruz.....	Municipal.....								
5 Stockton.....	do.....								
6 Vallejo.....	do.....								
COLORADO.									
7 Colorado Springs.....	Municipal.....								
8 Denver.....	do.....								
9 Visiting Nurse Assn., 536 Temple Court Building.									
10 Pueblo.....	Municipal.....								
11 Trinidad.....	do.....								
CONNECTICUT.									
12 Ansonia.....	Municipal.....								
13 Nurse Assn., Ansonia, Derby, and Shelton.									
14 Bridgeport.....	Municipal.....								
15 Bridgeport Visiting Nurse Assn., 475 State St.		1	1	175	2	1		1	
16 Bristol.....	Municipal.....								
17 Bristol Visiting Nurse Assn.,* 343 N. Main St.									
18 Danbury.....	Municipal ¹								
19 Greenwich.....	do.....								
20 Hartford.....	do.....								
21 Babies Hospital,* 243 Market St.									
22 Visiting Nurse Assn., 34 Charter Oak Ave.									
23 Manchester.....	Municipal.....								
24 Cheney Brothers, South Manchester		1	1	* 18			2		2
25 Meriden town.....	Municipal.....								
26 Young Women's Christian Association, 32 Crown St.		1			(?)	1	1		
27 Middletown.....	Municipal.....								
28 District Nurse Assn., 181 High St.		1	1	94		1			1
29 Social Service League, 165 Broad St.									
30 Naugatuck.....	Municipal ²								
31 New Britain.....	do.....								
32 Milk Supply Station.....		1		104	6	2			
33 Visiting Nurse Assn., 65 S. High St.									
34 New Haven.....	Municipal.....								
35 Infant Welfare Assn., 200 Orange St.		4	2	165	4	4			* 1
36 Visiting Nurse Assn., 200 Orange St.									
37 New London.....	Municipal.....								
38 Associated Charities.....									
39 Norwalk.....	Municipal.....								

¹ Baby conference once a week; general dispensary 2 afternoons a week.² No information supplied.³ Work reported. Detailed information not available.⁴ To certain extent by school nurse.⁵ For period of 2 months.⁶ Between mothers and nurses; family physicians consulted when necessary.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

43

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Supporting an obstetrical clinic.	Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.						
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					
							3		3		2				X	1
															X	2
															X	3
															X	4
															X	5
																6
							7		7		7			X		7
															X	8
															X	9
															X	10
															X	11
							1		1		1					12
																13
X	X			X	X	6					1		X		X	14
															X	15
															X	16
						(⁵) ₁	(⁵) ₁	(⁵) ₁	(⁵) ₁						X	17
															X	18
													X	X	X	19
															X	20
							7		7				X	X		21
																22
(⁶)	X						(⁶)		(⁶)		2				X	23
	X		X	X											X	24
																25
																26
(⁷)	X		X	X			4		4		4		X		X	27
																28
																29
																30
	X		X	X	X	3		3							X	31
																32
X	X		X	X	X	7									X	33
																34
																35
																36
																37
																38
																39

¹ General cooperation by physicians.

² School nurses.

³ Help from Visiting Nurse Assn. in care of sick babies.

⁴ Available for students of Yale Medical School.

⁵ Financed by Civic Federation.

⁶ Milk dispensed, but no regular station maintained.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

			Infant-welfare stations.							
State and city.		Agency.	Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
			Summer.	Winter.			Summer.		Winter.	
							Full time.	Part time.	Full time.	Part time.
ILLINOIS.										
1	Alton.....	Municipal.....								
2	Aurora.....	do.....								
3	Belleville.....	do.....								
4	Bloomington.....	do. ¹								
5	Calro.....	do.....								
6	Canton.....	do.....								
7	Champaign.....	do. ¹								
8	Chicago.....	Municipal (division of child hygiene) ²	3	3	1,089	3	9		3	
9		Infant Welfare Society of Chicago, ² 104 S. Michigan Ave.	21	21	5,492	23	24		24	
10		Jewish Aid Society, West Side Dispensary, 1012 Maxwell St.	1	1	928	43	2		2	
11		Lying-in Hospital and Dispensary, 1336 Newberry Ave.								
12		Mary Crane Day Nursery, ⁵ 818 Gilpin Place.								
13		Olivet Dispensary, 1500 Hudson St.	1	1	285	2	1		1	
14		Visiting Nurse Assn. of Chicago, ² 104 S. Michigan Ave.								
15	Chicago Heights.....	Municipal.....								
16	Cicero.....	do.....								
17	Danville.....	do.....								
18	Decatur.....	do.....								
19		Woman's Club ¹								
20	East St. Louis.....	Municipal.....								
21	Elgin.....	do.....								
22	Evanston.....	do.....								
23		Visiting Nurse Assn., 732 Emerson St.								
24	Freeport.....	Municipal.....								
25	Galesburg.....	do.....								
26		Galesburg Visiting Nurse Assn., City Hall.	(*)		19	(10)	1			
27	Jacksonville.....	Municipal.....								
28	Joliet.....	do.....								
29	Kankakee.....	do.....								
30	La Salle (associated with Peru and Oglesby).	Hygienic Institute, Department of Health for La Salle, Peru, and Oglesby. ¹¹	2	2	140	(25)	2		1	
31	Lincoln.....	Municipal.....								
32	Mattoon.....	do.....								
33	Moline.....	do.....								
34		King's Daughters' visiting nurse department, 1530 1/2 Third Ave.	1	1	165	1	3	1	3	1
35	Oak Park.....	Municipal ¹								
36	Peoria.....	do.....								
37		Visiting Nurse Committee, Associated Charities, ¹ 301 City Hall.								
38		Child's Welfare League ¹								
39		Pure milk dispensary ¹								
40	Quincy.....	Municipal.....								

¹ No information supplied.² Health department, Visiting Nurse Assn. of Chicago, and other agencies cooperate with Infant Welfare Society of Chicago, under which all infant-welfare work is centralized.³ School nurses employed in summer. Cooperate with Infant Welfare Society of Chicago.⁴ 3 additional physicians in summer.⁵ Furnishes headquarters for 1 station, maintained by Infant Welfare Society of Chicago.⁶ Staff of day nursery available for this work.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					Supporting an obstetrical clinic.
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.				
	X														1
	X														2
	X														3
															4
			X												5
															6
															7
															8
															9
															10
															11
															12
	X			X											13
															14
															15
															16
															17
															18
															19
															20
															21
															22
															23
															24
	X														25
															26
															27
															28
															29
		X													30
															31
															32
															33
	X			X											34
															35
															36
															37
															38
															39
															40

¹ Limited.

² Work reported. Detailed information not available.

³ A course of baby conferences held in summer of 1914.

⁴ General cooperation by physicians.

⁵ Largely supported by private gifts.

⁶ Health department physicians.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

[Sign (X) signifies that some work is

State and city.		Agency.	Infant-welfare stations.								
			Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.				
			Summer.	Winter.			Summer.		Winter.		
							Fulltime.	Parttime.	Fulltime.	Parttime.	
ILLINOIS—continued.											
1	Rockford.....	Municipal									
2		Visiting nurse department, Public Welfare Assn., 116 S. Wyman St.	1		35	1	3		2	1	
3	Rock Island.....	Municipal									
4		Visiting Nurse Assn., West End Settlement House.	1	1	56	1	2	1	2	1	
5	Springfield.....	Municipal									
6	Streator.....	do.									
7	Waukegan.....	do.									
INDIANA.											
8	Anderson.....	Municipal									
9	East Chicago.....	do.	1		(?)		1				
10		Welfare Association.....									
11	Elkhart.....	Municipal									
12	Elwood.....	do.									
13	Evansville.....	do.									
14		Babies' Milk Fund Assn. of Evansville.	1	1	532	7	2		2		
15	Fort Wayne.....	Municipal									
16		First Presbyterian Church	1		85	12	1	4			
17	Gary.....	Municipal									
18	Hammond.....	do.	1	1		2	2	1	2		
19	Huntington.....	do.									
20		Local Council of Women, ¹ 335 W. Matilda St.									
21	Indianapolis.....	Municipal									
22		Children's Aid Assn., City Hall	8	4	1,352	5	5	2	2	2	
23		Bethany Social Center and Flanner House.	2	2		2		2		2	
24	Jeffersonville.....	Municipal ¹									
25	Kokomo.....	do.									
26	Lafayette.....	do.									
27		Flower Mission ²									
28	Laporte.....	Municipal									
29	Logansport.....	do.									
30		Red Cross Assn. of Cass County, Masonic Temple.									
31	Marion.....	Municipal									
32	Michigan City.....	do.									
33	Mishawaka.....	do.									
34	Muncie.....	do.									
35	New Albany.....	do.									
36	Peru.....	do. ³									
37	Richmond.....	do.									
38		Visiting Nurse Assn., Commercial Club rooms.									
39	South Bend.....	Municipal									
40		Children's Free Dispensary and Hospital, 1031 W. Division St.	2	1	129	6	1		1		
41		Visiting Nurse Assn. of South Bend, ³ 219 Jefferson Bldg.									
42	Terre Haute.....	Municipal									
43		Terre Haute Social Settlement, ³ 29 N. First St.									
44	Vincennes.....	Municipal									

¹ Work reported. Detailed information not available.² No information supplied.³ Under 5 years of age.⁴ Delivered by milk committee to home, upon orders.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

		Infant-welfare stations.								
State and city.		Agency.	Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
			Summer.	Winter.			Sum-mer.		Winter.	
							Full time.	Part time.	Full time.	Part time.
IOWA.										
1	Boone.....	Municipal.....								
2	Burlington.....	do.....								
3		Child Welfare Committee of the Red Cross.								
4		Visiting Nurses Assn. of Burlington, 416 Columbia St.	1	1	(2)	9	1		1	
5	Cedar Rapids.....	Municipal.....								
6	Clinton.....	do.....								
7	Council Bluffs.....	do. ^a								
8	Davenport.....	do.....								
9		Davenport Visiting Nurse Assn., 1216 W. Third St.	1	1	98	1		4		4
10	Des Moines.....	Municipal.....								
11		Des Moines Visiting Nurse Assn., 418 Century Bldg.	1		85	2	4	1		
12	Dubuque.....	Municipal.....								
13		Dubuque Visiting Nurse Assn.								
14	Fort Dodge.....	Municipal.....								
15	Iowa City.....	do.....								
16	Keokuk.....	do. ^a								
17		Visiting Nurse Assn., 425 Blondeau St.								
18	Marshalltown.....	Municipal ^a								
19	Mason City.....	do.....								
20		Cerro Gordo County visiting nurse, 215 N. Madison Ave.								
21	Muscatine.....	Municipal.....								
22	Ottumwa.....	do.....								
23	Sioux City.....	do.....								
24		Child Welfare Assn. ^a								
25		Visiting Nurse Assn.....								
26	Waterloo.....	Municipal.....								
27		Associated Charities and Corrections, City Hall.								
KANSAS.										
28	Atchison.....	Municipal.....								
29	Coffeyville.....	do.....								
30	Fort Scott.....	do.....								
31	Hutchinson.....	do.....								
32	Independence.....	do.....								
33	Kansas City.....	do.....								
34	Lawrence.....	do.....								
35		Social Service League.....								
36	Leavenworth.....	Municipal.....								
37	Parsons.....	do.....								
38	Pittsburg.....	do.....								
39	Topeka.....	do.....								
40		Topeka Public Health Nursing Assn., City Bldg.	2		20		2			
41	Wichita.....	Municipal.....								

51

being done in the field designated.]

[illegible]

* Under supervision of Des Moines Visiting Nurse Assn.

• Situated in "model cottage" of Roadside Settlement..

⁷ School nurse.

* With State assistance in salary of inspector.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

			Infant-welfare stations.							
State and city.		Agency.	Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
			Summer.	Winter.			Summer.		Winter.	
							Fulltime.	Parttime.	Fulltime.	Parttime.
KENTUCKY.										
1	Covington.....	Municipal.....								
2	Frankfort.....	do. ¹								
3	Henderson.....	do. ¹								
4	Lexington.....	do. ¹								
5		Fayette Tuberculosis Assn. and Visiting Nurses' Assn., 614 W. Main St.	1		22	2	1			
6	Louisville.....	Municipal.....								
7		Babies' Milk Fund Assn. of Louisville, 215 E. Walnut St.	5	5	628	7	8		8	
8	Newport.....	Municipal.....								
9	Owensboro.....	do. ¹								
10	Paducah.....	do. ¹								
11		Settlement House, ⁴ 1405 S. Third St.								
LOUISIANA.										
12	Alexandria.....	Municipal.....								
13	Baton Rouge.....	do. ¹								
14	Lake Charles.....	do. ¹								
15	Monroe.....	do. ¹								
16	New Orleans.....	do. ¹								
17		Child Welfare Assn., ⁵ 419 Gravier St.	(*)	(*)	716	4	6		6	
18	Shreveport.....	Municipal.....								
MAINE.										
19	Auburn.....	Municipal.....								
20	Augusta.....	do. ¹								
21	Bangor.....	do. ¹								
22	Biddeford.....	do. ¹								
23		Trull Hospital Aid Assn. ³								
24	Lewiston.....	Municipal.....								
25	Portland.....	do. ¹								
26		District Nursing Assn. of Portland.								
27		Edward Mason Dispensary, milk station, ⁴ 65 India St.	1	1	297	2	1		1	
28	Waterville.....	Municipal.....								
MARYLAND.										
29	Baltimore.....	Municipal.....								
30		Instructive Visiting Nurse Assn. of Baltimore, 1123 Madison Ave.								
31		Mothers' Relief Society, 1123 Madison Ave.								
32		Johns Hopkins Hospital.....								
33		Maryland Assn. for Study and Prevention of Infant Mortality (Babies' Milk Fund Assn.), 10 E. Fayette St.	13	13	4,803	8	11	3	11	
34		Thomas Wilson Sanitarium.....								
35	Cumberland.....	Municipal.....								
36	Frederick.....	do. ¹								
37		Frederick County Branch of the Maryland Assn. for the Prevention and Relief of Tuberculosis, 133 S. Market St.								
38	Hagerstown.....	Municipal.....								

¹ Work reported. Detailed information not available.² No information supplied.³ Clinic supported by medical department of the University of Louisville.⁴ Affiliated with American Red Cross Town and Country Nursing Service.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.			Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.		Supporting an obstetrical clinic.				
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					
																1
																2
																3
																4
																5
																6
																7
																8
																9
																10
																11
																12
																13
																14
																15
																16
																17
																18
																19
																20
																21
																22
																23
																24
																25
																26
																27
																28
																29
																30
																31
																32
																33
																34
																35
																36
																37
																38

* Appropriation made by city toward support of Child Welfare Association.

† Number not supplied.

‡ City furnishes salary of nurse for Edward Mason Dispensary, milk station.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

[Sign (X) signifies that some work is

State and city.		Agency.	Infant-welfare stations.									
			Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.					
			Summer.	Winter.			Sum-mer.		Win-ter.			
							Full time.	Part time.	Full time.	Part time.		
MASSACHUSETTS.												
1	Adams.....	Municipal ¹										
2	Arlington.....	do.....										
3	Attleboro.....	do.....										
4		Attleboro Anti-Tuberculosis Society, 124 Pleasant St.										
5	Beverly.....	Municipal.....										
6		Beverly Hospital,* Herrick St.										
7	Boston.....	Municipal (division of child hygiene)										
8		Boston Lying-in Hospital, 24 McLean St.										
9		Children's Hospital, ¹ Huntington Ave.										
10		Denison House, Boston College Settle-ment,* 93 Tyler St.	(*)	(*)								
11		Cottage Place Day Nursery,* 1049 Co-lumbus Ave., Roxbury.	(*)	(*)								
12		Dorchester House,* 7 Gordon Place....	(*)	(*)								
13		Elizabeth Peabody House,* 357 Charles St.	(*)	(*)								
14		Infants' Hospital, social service de-partment, 55 Van Dyke St.										
15		Instructive District Nursing Assn.,* 561 Massachusetts Ave.										
16		Lincoln House,* 80 Emerald St.....	(*)	(*)								
17		Massachusetts General Hospital, social service department, Blossom St.	1	1	* 143	3	1	1	1			
18		Massachusetts Homeopathic Hospital, 82 E. Concord St.	1	1	134	1	1		1			
19		Maverick Dispensary, 18 Chelsea St., East Boston.										
20		Milk and Baby Hygiene Assn., 26 Ben-net St.	12	12	4,097	13	17		14			
21		Milk Fund, 55 Van Dyke St.										
22		Neighborhood House,* 62 Hale St....	(*)	(*)								
23		North End Union,* 20 Parmenter St....	(*)	(*)								
24		Peter Brent Brigham Hospital, 26 Charter St.										
25		Roxbury Neighborhood House,* 858 Albany St.	(*)	(*)								
26		South Bay Union,* 640 Harrison Ave..	(*)	(*)								
27		South End House, ¹ 43 East Canton St.										
28		Woman's Municipal League, 209 Bea-con St.										
29	Brockton.....	Municipal ¹²	2		200	4	1					
30	Brockton Visiting Nurse Assn.....											
31	Brookline.....	Municipal.....										
32		Brookline Friendly Society, Union Building.										
33	Cambridge.....	Municipal.....	5		135				3			
34		Neighborhood House, Moore St.....	1	1	66	1			1		1	
35		Cambridge Visiting Nursing Assn., 35 Bigelow St.										

¹ No information supplied.

* Nurses employed when necessary.

* Work reported. Detailed information not available.

* Out-patient nursing work done by Instructive District Nursing Assn.

* Give quarters for infant-welfare station maintained by Milk and Baby Hygiene Assn.

* Supply nurses for pregnancy clinic of Boston Lying-in Hospital.

* Feeding clinic.

* Number visited by social service worker.

* In cooperation with Woman's Municipal League. Nurses supplied by Instructive District Nursing Assn.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Supporting an obstetrical clinic.	Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.						
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					
							3		3		3			X		
						(3) 15	(3)	(3) 15	(3)	(3)	(3) 15	X		X		
						(2)		(2)		1	1			X		
											1		X			

¹⁸ Formerly carried on in cooperation with Peter Brent Brigham Hospital and Instructive District Nursing Assn. Work transferred to management of Woman's Municipal League.

¹⁹ Organizes classes for instruction of mothers in baby hygiene.

²⁰ Maintains 3 pregnancy clinics in cooperation with the Boston Lying-in Hospital, the Maverick Dispensary, the Peter Brent Brigham Hospital, and the Neighborhood House, Cambridge. Nurses supplied by Instructive District Nursing Assn.

²¹ Work of Brockton Milk and Baby Hygiene Assn. taken over by health department.

²² Work recently organized.

²³ Between mothers and nurses.

²⁴ In cooperation with Woman's Municipal League, Boston.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

[Sign (X) signifies that some work is

		Infant-welfare stations.									
State and city.		Agency.		Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
				Summer.	Winter.			Sum-mer.		Winter.	
								Full time.	Part time.	Full time.	Part time.
MASSACHUSETTS—continued.											
1	Chelsea.....	Municipal.....									
2	Chicopee.....	do.....									
3	Clinton.....	do.....									
4	Everett.....	do.....									
5		Instructive District Nursing Assn., 8 Forest Ave.									
6	Fall River.....	Municipal.....									
7		District Nursing Assn., 374 Anawan St.	8	8	788	6	8		8		
8		Union Hospital, social service department, 538 Prospect St.									
9	Fitchburg.....	Municipal.....									
10		Visiting Nursing Assn., 336 Main St.									
11	Framingham.....	Municipal.....									
12		The Framingham Nursing, Relief, and Anti-Tuberculosis Assn., South Framingham.									
13	Gardner.....	Municipal.....									
14		Associated Charities.....									
15	Gloucester.....	Municipal.....									
16		Gloucester District Nursing Assn., City Hall.									
17	Greenfield.....	Municipal.....									
18		Mothers' Club ¹	(⁹)	(⁹)							
19		Greenfield Visiting Nurse Assn., 17 Federal St.									
20	Haverhill.....	Municipal.....									
21	Holyoke.....	do.....	13	13	343	2	2		2		
22		Holyoke Infant Hygiene Assn., 34 Sargeant St.									
23	Lawrence.....	Municipal.....									
24		Sanitary Milk Committee, 31 Jackson St.	1	1	125	2	2	1	1		
25		Lawrence City Mission.....									
26	Leominster.....	Municipal ¹⁰									
27	Lowell.....	do.....									
28		Lowell Guild, 17 Dutton St.	1	1	200	2	3		2		
29	Lynn.....	Municipal.....									
30		Day Nursery Assn. (baby clinic), 73 Blossom St.	3	3	141	1	2		2		
31	Malden.....	Municipal.....									
32		Milk and Baby Hygiene Society, 84 Linden Ave.	1	1	(¹⁰)	(¹¹)	1				
33	Marlborough.....	Municipal.....									
34	Medford.....	do.....									
35		Medford Visiting Nurse Assn., 14 Salem St.									
36	Melrose.....	Municipal.....									
37		Melrose Hospital.....									
38	Methuen.....	Municipal.....									
39	Milford.....	do.....									

¹ Supplied by R. B. Frost General Hospital.² Work reported. Detailed information not available.³ City employs nurse of Instructive District Nursing Assn. for care of eyes of newborn infants.⁴ In cooperation with District Nursing Assn.⁵ Services of district nurse secured when necessary.⁶ 5 drug-store substations to which milk is sent for distribution.⁷ 1 assistant and 1 helper, with salary.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

57

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.	Supporting an obstetrical clinic.			
						2	11	2	11		11				1
							1		1						2
							2		2		2				3
															4
															5
															6
X	X		X	X		2		2			10	X	X	X	7
															8
							1		1				X	X	9
							2		2						10
							1		1				X	X	11
															12
							1		1		1		X	X	13
															14
							3		3		3		X	X	15
							1		1						16
							1		1	(2)	(2)		X	X	17
							1		1		1		X	X	18
															19
X	X		X	X	X		1		1		1		X	X	20
															21
															22
X	X		X	X	X										23
															24
X	X			X	X										25
X	X			X	X										26
X	X			X	X						2		X	X	27
															28
															29
															30
															31
															32
															33
															34
							2		2		2			X	35
															36
															37
															38
															39

¹ 4 in summer.

² Sent out by board of health.

³ No information supplied.

⁴ Cases are reported to Lowell Guild nurses.

⁵ Services of tuberculosis nurse available for this work when necessary.

⁶ Cooperation with family physician.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

State and city.	Agency.	Infant-welfare stations.							
		Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
		Summer.	Winter.			Sum-mer.		Win-ter.	
						Full time.	Part time.	Full time.	Part time.
MASSACHUSETTS—continued.									
1 New Bedford.....	Municipal								
2	Instructive Nursing Assn., 202 Coffin Bldg.	3		357	3	11	9		
3 Newburyport.....	Municipal								
4 Newton.....	do.								
5	Newton District Nursing Assn., ¹ New- ton Hospital.								
6 North Adams.....	Municipal								
7	Visiting Nurse Aid Assn., 8 Spring St.								
8 Northampton.....	Municipal								
9	District Nurse Assn.								
10 Peabody.....	Municipal ²								
11 Pittsfield.....	do.								
12 Plymouth.....	do.								
13 Quincy.....	do. ¹								
14 Revere.....	do.								
15 Salem.....	do.	1		² 553	(³)	2			
16	District Nurse Committee of Woman's Friend Society, 12 Elm St.								
17 Somerville.....	Municipal								
18	Somerville Visiting Nurse Assn., 1 Webster St.								
19 Southbridge.....	Municipal								
20	Southbridge Visiting Nurse Assn., 18 Marcy St.	(²)	(²)						
21 Springfield.....	Municipal								
22	Baby Feeding Assn., ² 613 Main St.								
23	District Nurse Assn., ² 613½ Main St.								
24 Taunton.....	Municipal								
25 Wakefield.....	do.								
26	Visiting Nurse Assn., 5 Avon St.								
27 Waltham.....	Municipal								
28	Waltham District Nursing Assn., Main St.								
29 Watertown.....	Municipal ¹								
30 Webster.....	do.								
31	District nurse, S. Slater & Sons, Inc. ¹								
32 Westfield.....	Municipal								
33	Westfield Visiting Nurse Assn., 13 Broad St.								
34 Weymouth.....	Municipal								
35	Weymouth Visiting Nurse Assn., 178 Pleasant St. SW.								
36 Winthrop.....	Municipal								
37 Woburn.....	do.								
38 Worcester.....	do.								
39	Clean Milk Stations Committee ⁴	7		477	14	² 4			
40	Worcester Society for District Nursing, 27 Elm St.								
MICHIGAN.									
41 Adrian.....	Municipal								
42	Associated Charities, Lenawee County Bank Bldg.								
43 Alpena.....	Municipal								

¹ No information supplied.² Work reported. Detailed information not available.³ Under 2 years of age.⁴ General cooperation by physicians.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.						Supporting an obstetrical clinic.
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.				
X				X	X		1		1		8				1
	X						1		1		1			X	2
		X													3
															4
						2		1			1				5
															6
															7
															8
															9
						(2)	(3)	(3)	(3)	(3)	(3)		X	X	10
													X	X	11
													X	X	12
													X	X	13
X	X		X	X	X		1	1	1		1		X	X	14
							1								15
						2		2			2			X	16
															17
							1	1	1		1			X	18
							3							X	19
															20
													X	X	21
															22
															23
							1	1	1		1			X	24
														X	25
							1	1	1		1		X	X	26
							3	3					X	X	27
															28
															29
															30
							1	1	1		1			X	31
															32
															33
							1	1	1		1				34
															35
															36
X	X	X	X	X		2		1							37
						1	(9)	1	(9)	1	(9)		X	X	38
															39
															40
															41
							1	1	1		1		X		42
															43

6 Nurses furnished by Waltham District Nursing Assn.

7 Executive officer of board of health acts as chairman.

8 4 helpers.

9 Services of 10 general visiting nurses available when necessary.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

[Sign (X) signifies that some work is

State and city.	Agency.	Infant-welfare stations.							
		Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
		Summer.	Winter.			Sum-mer.		Win-ter.	
						Full time.	Part time.	Full time.	Part time.
MICHIGAN—contd.									
1 Ann Arbor.....	Municipal.....								
2	University of Michigan Hospital, Circle of King's Daughters.								
3 Battle Creek.....	Municipal.....								
4 Bay City.....	do.....								
5	Civic League Free Dispensary and Visiting Nurse Committee, 1009 Washington St.								
6 Detroit.....	Municipal (division of infant welfare).	4	4	1,413	5	8		5	
7	Babies' Milk Fund, 924 Brush St.	4	4	1,528	2	5		4	
8	Children's Free Hospital, St. Antoine St. and Farnsworth Ave.	1	1	1,305	4	2		2	
9	Visiting Nurse Assn., 924 Brush St.								
10 Escanaba.....	Municipal.....								
11 Flint.....	do.....								
12	Child Welfare Society.....	2	2	190	2		1		1
13 Grand Rapids.....	Municipal.....								
14	Clinic for Infant Feeding, D. A. Blodgett Home for Children, Louis and Market Sts.	2	2	921	14	5		5	
15 Holland.....	Municipal.....								
16 Ironwood.....	do.....								
17	Oliver Mining Co. visiting nurse ¹								
18 Ishpeming.....	Municipal.....								
19 Jackson.....	do.....								
20	Associated Charities, Wesley and Mechanic Sts.	1	1	(²)	1	1		1	
21 Kalamazoo.....	Municipal.....								
22	Kalamazoo Civic Improvement League, 223 N. Park St.								
23 Lansing.....	Municipal.....								
24 Manistee.....	do.....								
25 Marquette.....	do.....								
26	Visiting Nurse Assn., Room 26, Harlow Block.								
27 Menominee.....	Municipal.....								
28 Muskegon.....	do.....								
29	Visiting Nurse Assn., 101 Houston Ave.	1	1	20	(²)	1		1	
30	Hackley Hospital.....								
31 Pontiac.....	Municipal.....								
32 Port Huron.....	do.....								
33	Visiting Nurse Assn., of St. Clair County, 1416 Military St.								
34 Saginaw.....	Municipal.....								
35 Sault Ste. Marie.....	do.....								
36 Traverse City.....	do. ⁴								
MINNESOTA.									
37 Duluth.....	Municipal (division of child welfare).	3	1	300	3	3	2	2	2
38	Scottish Rite Masons, infant-welfare department, Masonic Temple.	1	1	325	1	1		1	
39 Mankato.....	Municipal.....								
40	Visiting Nurse Assn., 129 S. Broad St.								
41 Minneapolis.....	Municipal.....								
42	Infant Welfare Society, 923 Plymouth Bldg.	4	4	(²)	5	4		4	

¹ 15 school nurses; 5 baby nurses.² Use board of health clinics.³ 1 nurse; 1 assistant; employed by board of health.⁴ Work reported. Detailed information not available.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

61

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.		
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.						
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					Supporting an obstetrical clinic.
						1	2	1	2		1	X			X	1
											4					2
																3
						2		2			2				X	4
																5
	XX					20		5			10					6
											5					7
											2					8
						25		25			25					9
	X	X														10
	X	X														11
																12
	X	X														13
																14
																15
																16
	X	X														17
																18
																19
																20
						1		1			1				X	21
															X	22
																23
																24
																25
																26
																27
	X	X														28
																29
																30
																31
																32
																33
																34
																35
																36
																37
	X	X									3				X	38
																39
																40
	X	X														41
																42

* Number not supplied.

* Those on staff of Hackley Hospital.

Limited.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

State and city.			Agency.			Infant-welfare stations.								
						Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.				
						Summer.	Winter.			Summer.		Winter.		
										Full time.	Part time.	Full time.	Part time.	
1	MINNESOTA—contd.													
2	St. Cloud	Municipal												
3	St. Paul	do.												
4	Stillwater	Municipal												
5	Virginia	do.												
6	Winona	do.												
7		Margaret Simpson Home												
MISSISSIPPI.														
8	Hattiesburg	Municipal												
9	Jackson	do.												
10	Meridian	do.												
11	Natchez	do.												
12	Vicksburg	do.												
MISSOURI.														
13	Hannibal	Municipal												
14	Jefferson City	do.												
15	Joplin	do.												
16	Kansas City	Municipal (division of child hygiene)	5	5	(4)	2	1							
17		Institutional Church of North End, milk station, 1115 Charlotte St.	1	1	130	1	1							
18		Minute Circle, 1518 Spruce Ave.	1	1	150	1	1							
19		St. Luke's Hospital Club	1	1	(4)	(4)	1							
20		Swope Settlement	1	1	(4)	3								
21		Visiting Nurse Assn., ⁶ 115 Charlotte St.												
22	Moberly	Municipal												
23	St. Joseph	do.												
24		Baby Welfare Assn., ⁷ 2307 S. Sixth St.	1	1	311	1	2							
25		St. Joseph Visiting Nurse Assn., ⁸ 220 N. Ninth St.												
26	St. Louis	Municipal												
27		Baby Welfare Assn., ¹² Vanel Bldg.	2	2	(4)	2	3							
28		Kingdom House, 1033 S. Eighth St.	13	13	140	3	1							
29		St. Louis Pure Milk Commission, ¹³ 1726 N. Thirteenth St.	14	7	14	1,026	12	2						
30		Social service department, Washington University Hospital and the St. Louis Children's Hospital, Euclid and Kingshighway.	1	1	(4)	16	5	17	1					
31		St. Louis Visiting Nurse Assn., ¹³ 3908 Olive St.												
32	Sedalia	Municipal												
33	Springfield	do.												
34		Visiting Nurse Assn., Court House	1		77	(4)								
35	Webb City	Municipal												
MONTANA.														
36	Anaconda	Municipal												
37	Billings	do.												
38	Butte	do.												

¹ Work reported. Detailed information not available.² No information supplied.³ 3 for white babies; 2 for colored babies.⁴ Number not supplied.⁵ Special herd kept to supply milk to clinic babies.⁶ Supervise the nurses of North End and Minute Circle milk stations and clinics.⁷ City appropriated \$500 toward expenses of Baby Welfare Assn.⁸ Employ nurses of St. Joseph Visiting Nurse Assn. for this work.⁹ In addition, 3 specialists.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Supporting an obstetrical clinic.	Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.						
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					
							1		1							1
											1					2
																3
																4
							1		1		1				1	5
																6
																7
																8
																9
																10
																11
																12
																13
																14
																15
																16
																17
											1					18
											1					19
																20
											1					21
											2					22
																23
																24
																25
																26
											1					27
																28
																29
										1						30
											10					31
																32
											2					33
																34
																35
																36
																37
																38

¹⁰ In cooperation with Baby Welfare Assn.

¹¹ Number of nurses not available.

¹² St. Louis Visiting Nurse Assn. supplies nurses for Baby Welfare Assn. and St. Louis Pure Milk Commission.

¹³ Operated by St. Louis Pure Milk Commission.

¹⁴ In addition, 1 infant feeding and instructive clinic at Kingdom House and 9 pure-milk distributing stations.

¹⁵ Number receiving milk at stations; number enrolled, 1,897.

¹⁶ Total number, including physicians from hospitals, 25.

¹⁷ In addition, 1 social worker and many volunteers.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

	State and city.	Agency.	Infant-welfare stations.							
			Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
			Summer.	Winter.			Sum-mer.		Win-ter.	
							Full time.	Part time.	Full time.	Part time.
	MONTANA—contd.									
1	Great Falls.....	Municipal.....								
2	Helena.....	do.....								
3	Missoula.....	do.....								
	NEBRASKA.									
4	Grand Island.....	Municipal.....								
5	Lincoln.....	do. ¹								
6		Charity Organization Society, ² 228 S. Tenth St.								
7	Omaha.....	Municipal.....								
8		Visiting Nurse Assn., 408 City Hall.....	1		35	2		8		
9	South Omaha.....	Municipal.....								
	NEVADA.									
10	Reno.....	Municipal.....								
	NEW HAMPSHIRE.									
11	Berlin.....	Municipal.....								
12		Berlin Instructive District Nursing Fund.								
13	Concord.....	Municipal.....								
14		Concord District Nursing Assn., Room 5, City Hall.								
15	Dover.....	Municipal.....								
16		District Nurse Assn., 171 Central Ave.								
17	Keene.....	Municipal.....								
18	Laconia.....	do. ¹								
19	Manchester.....	do. ¹								
20		Manchester District Nursing Assn., Beech and Merrimac Sts.	1	1	300		4	1	5	
21		Infant Aid Assn., ² 118 Central St.	3		266	4	4			
22	Nashua.....	Municipal.....								
23	Portsmouth.....	do.....								
24		Portsmouth District Nursing Assn., 29 Burkitt St.								
	NEW JERSEY.									
25	Asbury Park.....	Municipal.....								
26		Day Nursery of Child Welfare Assn., 907 Sewall Ave.								
27	Atlantic City.....	Municipal.....								
28		Organized Charities, 223 Guarantee Trust Bldg.								
29	Bayonne.....	Municipal.....								
30	Bloomfield.....	do.....								
31		League for Friendly Service, ³ 36 Broad St.	1	1	(⁴)	1		2		2
32	Bridgeton.....	Municipal.....								
33		City Nurse Committee, ⁵ 106 E. Commerce St.								

¹ Work reported. Detailed information not available.² City makes appropriation toward maintenance of nurse.³ Classes held in Northside Neighborhood House.⁴ No information supplied.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

65

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.			Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.		Supporting an obstetrical clinic.				
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					

* City appropriates \$300 toward expenses of Infant Aid Assn.

† Limited.

‡ Affiliated with American Red Cross Town and Country Nursing Service.

§ Number not supplied.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

	State and city.	Agency.	Infant-welfare stations.								
			Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.				
			Summer.	Winter.			Summer.		Winter.		
							Fulltime.	Parttime.	Fulltime.	Parttime.	
	NEW JERSEY—contd.										
1	Camden.....	Municipal ¹									
2		Visiting Nurse Society, ¹ 9 Broadway..	1	1	212	(?)	5		5		
3	East Orange.....	Municipal ²	2	2	124	1	1		1		
4		East Orange Aid to the Sick, ³ 11 N. Munn Ave.									
5	Elizabeth.....	Municipal									
6		Milk stations, St. Elizabeth's Hospital, ⁴ 8 Broad St.	2		133	(?)	(?)	(?)	(?)	(?)	
7	Garfield.....	Visiting Nurse Assn., 122 Magnolia Ave.									
8	Hackensack.....	Municipal									
9		do									
10		Children's Relief and General Welfare Society, Summit Ave.									
11	Harrison.....	Municipal									
12	Hoboken.....	do ⁵		(?)							
13	Irvington.....	do ⁶									
14	Jersey City.....	Municipal (division of child hygiene)..	1	1	442	1	1	10	1		
15		Child Welfare Assn. ¹¹									
16	Kearny.....	Municipal									
17	Long Branch.....	do									
18		Long Branch Visiting Nurse Assn., City Hall									
19	Millville.....	Municipal									
20	Montclair.....	do	1	1	115	1		1		1	
21	Morristown.....	do									
22		Central Bureau of Social Service, 27 South St.									
23		Maternity Fund Assn., 42 Elm St.									
24		Neighborhood House Assn., ⁸ Flagler St.									
25	Newark.....	Municipal	3	3	1,729	1	3		3		
26		Babies Hospital, ⁹ 427 High St.									
27	New Brunswick.....	Municipal									
28		Visiting Nurses' Assn., 147 Bayard St..	1		10	7		3			
29	Orange.....	Municipal ¹²	1	1	208	1	1		1		
30		Baby Welfare Assn. ¹³									
31		Diet Kitchen of the Oranges, ¹⁴ 124 Essex Ave.	2	2	255	2	1	1	1	1	
32		Visiting Nurses' Assn. of Orange and West Orange, ¹⁵ 24 Valley St.	2	2	150	2		2			2
33	Passaic.....	Municipal ¹⁶									
34		Passaic Diet Kitchen Assn., ¹⁷ 115 Passaic St.									
35	Paterson.....	Municipal									
36	Perth Amboy.....	do									
37	Phillipsburg.....	do									
38	Plainfield.....	do									

¹ City council makes an appropriation toward expenses of Visiting Nurse Society.² General cooperation by physicians.³ Infant-welfare work of the East Orange Aid to the Sick assumed by the health department Apr. 16, 1915. Work done in cooperation with that of the Baby Welfare Assn. of the Oranges.⁴ Joint Milk Committee of the Oranges.⁵ Work reported. Detailed information not available.⁶ Partly supported by city funds.⁷ Number not supplied.⁸ No information supplied.⁹ 8 months, from June 15, 1914, to Feb. 15, 1915.¹⁰ School nurses.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

67

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Supporting an obstetrical clinic.	Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.						
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					
X	X	X	X	X	X						4		X	X	X	1
				X	X	2								X	X	2
							3		3		3					3
							1		1				X	X	X	4
							(5)		(5)					X	X	5
X	X		X	X							1		X	X	X	6
							1		1		1		X	X	X	7
X	X					1		1			1		X	X	X	8
							1		1		1		X	X	X	9
X	X		X								3		X	X	X	10
X	X		X								1		X	X	X	11
X	X	X									2		X	X	X	12
						(5)		(5)			(5)		X		X	13
															X	14
															X	15
															X	16
															X	17
															X	18
															X	19
															X	20
															X	21
															X	22
															X	23
															X	24
															X	25
															X	26
															X	27
															X	28
															X	29
															X	30
															X	31
															X	32
															X	33
															X	34
															X	35
															X	36
															X	37
															X	38

¹¹ Cooperates with division of child hygiene.

¹² Affiliated with Baby Welfare Assn. of the Oranges.

¹³ Centralizing agency with which the following agencies are affiliated: Orange health department, Diet Kitchen of the Oranges, Visiting Nurses' Association of Orange and West Orange, the East Orange Aid to the Sick, the South Orange Society for Lending Comforts to the Sick, Civic Committee of the Woman's Club.

¹⁴ Under 2 years of age.

¹⁵ Figures for work in West Orange included with those for Orange. Work done in cooperation with that of the Baby Welfare Assn. of the Oranges.

¹⁶ Aid of State department of health.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

		Infant-welfare stations.							
State and city.	Agency.	Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
		Summer.	Winter.			Summer.		Winter.	
						Full time.	Part time.	Full time.	Part time.
NEW JERSEY—cont'd.									
1 2	Plainfield (contd)....	Baby Clinic and Day Nursery.....	1	1	20	2	4	4	
3		Charity Organization Society of Plainfield and North Plainfield, 323 Babcock Bldg.							
4		City Union of King's Daughters.							
5	South Orange.....	Visiting Nurse Assn., 324 Babcock Bldg.	1	1	49	1	1	1	
6	Trenton.....	Society for Lending Comforts to the Sick, 361 Vose Ave.							
7		Municipal.....							
8	Union.....	Phi Gamma Epsilon Society, 138 Allen St.	2	2	114	2	2	2	
9	West Hoboken.....	Municipal.....							
10	West New York.....	do.....							
11	West Orange.....	do.....							
12		Visiting Nurse Assn. ⁶							
NEW MEXICO.									
13	Albuquerque.....	Municipal.....							
NEW YORK.									
14	Albany.....	Municipal.....							
15		Central Christian Mothers Union, 2 Ash Grove Place.	2		200	3	3		
16	Amsterdam.....	Municipal.....	1		85	3	2		
17		Child Welfare Assn., 222 E. Main St.							
18	Auburn.....	Municipal ⁷							
19	Batavia.....	do. ⁸	2	2	782	(⁹)	1	1	
20	Binghamton.....	Municipal.....	*1	*1	(⁹)				
21		Rest Room Club, 107 Collier St.	2	2	329	31	7	7	
22	Buffalo.....	Municipal.....	7	7	1,589	7		16	16
23		Babies' Milk Dispensary of Buffalo, 181 Franklin St.							
24		District Nursing Assn., 181 Franklin St.							
25	Cohoes.....	Municipal.....							
26		State Charities Aid Assn., Cohoes Committee on Prevention of Tuberculosis, City Hall.	1		51	(⁹)	2		
27	Corning.....	Municipal.....	1		20	(⁹)	1		
28		Social Service Society.....							
29	Cortland.....	Municipal.....							
30	Dunkirk.....	do.....							
31	Elmira.....	do.....							
32		Elmira Federation for Social Service.	1		16	2	2		
33	Fulton.....	Municipal ¹⁰							
34		Women's Auxiliary.....	1	1	(⁹)	(⁹)	1	1	
35		Women's Civic League.....							
36	Geneva.....	Municipal ¹¹							
37	Glens Falls.....	do.....							

¹ Population under 10,000. Included in this table as having a part in the general plan of infant-welfare work in the Oranges.² Affiliated with Baby Welfare Assn. of the Oranges.³ Between mothers and nurses.⁴ Joint Milk Committee of the Oranges.⁵ Figures for work in West Orange included with those for Orange. Work done in cooperation with that of the Baby Welfare Assn. of the Oranges.⁶ No information supplied.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

69

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

[illegible]

¹ Number for 1 station; second station not opened until June, 1915.

• Work reported. Detailed information not available.

* Room where mothers can rest and feed their babies. President of club weighs and examines babies and gives advice to mothers and to expectant mothers. General cooperation by physicians.

10 Nurses provided by District Nursing Assn.

^u In addition to nurses attached to milk station maintained by Babies' Milk Dispensary of Buffalo.

¹³ In addition, 1 social-service worker and 2 volunteer nurses.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (x) signifies that some work is

State and city.		Agency.	Infant-welfare stations.									
			Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.					
			Summer.	Winter.			Summer.		Winter.			
							Full time.	Part time.	Full time.	Part time.		
NEW YORK—contd.												
1	Glens Falls (contd.)	Child Welfare Committee, ¹ City Hall.	1	1	108	2	1			1		
2	Gloversville.....	Municipal.....	1		175	1	2					
3		Day Nursery.....										
4		District Nurse Assn.....										
5	Hornell.....	Municipal.....	1		44	11		1				
6	Hudson.....	do.....										
7		Civic Improvement League, 602 Gifford Pl.										
8	Ithaca.....	Municipal.....	1		19	1		*1				
9		Visiting Nurse Assn., 512 Edgewood Pl.										
10		Ithaca Tuberculosis Committee, 222 E. State St.										
11	Jamestown.....	Municipal.....										
12		Visiting Nurse Assn., New Market Bldg.	*1	*1	28	1		(*)	(*)		(*)	(*)
13	Johnstown.....	Municipal.....	(2)									
14		Visiting Nurse Assn., 20 N. Melcher St.										
15	Kingston.....	Municipal.....										
16	Lackawanna.....	do.....	1		49		1					
17	Little Falls.....	do.....										
18		Fortnightly Club.....										
19	Lockport.....	Municipal.....	1		35	1	1					
20	Middletown.....	do.....										
21	Mount Vernon.....	do.....										
22	New Rochelle.....	do.....	66	59	238,427	1466	114			59		
23	New York.....	Municipal (bureau of child hygiene)*.										
24		Babies' Welfare Assn. of New York City, ¹² Center and Walker Sts.										
25	(Bronx and Manhattan Boroughs.)	After Care Circle of Jewish Maternity Hospital, 133 Clinton St.	1	1	624	1	2			2		
26		Babies Dairy, 511 W. Forty-first St.	3	3	636	2	5			5		
27		Babies Hospital of the City of New York, 135 E. Fifty-fifth St.	1	1	468	2	6			6		
28		Bellevue and Allied Hospitals, social service department, ¹⁴ E. Twenty-sixth St. and First Ave.										
29		Beth Israel Hospital, social service department, Monroe, Jefferson, and Cherry Sts.										
30		Bethany Mission of Broadway Tabernacle, ¹⁵ 455 Tenth Ave.	7	1	(14)	14	7	7		7		
31		Bryson Day Nursery, ¹⁶ 149 Avenue B.										
32		Children's Aid Society, 105 E. Twenty-second St.										
33		Church of the Sea and Land, 61 Henry St.	(18)	(18)								
34		Emanuel Chapel, 737 E. Sixth St.										
35		Fordham Hospital, social service department, Crotona Ave. and Southern Blvd.										
36		Free Out-Door Maternity Clinic, 216 E. Seventy-sixth St.	1	1	1,300	14	8			8		

¹ Work now carried on by Child Welfare Committee formerly distributed between Metropolitan Life Insurance nurse, visiting nurse employed by Women's Club, and the tuberculosis nurse.

² Work reported. Detailed information not available.

³ Time in station paid by board of health; nurses supplied by Ithaca Tuberculosis Committee.

⁴ Portion of nurse's time given to service in municipal milk station in summer.

⁵ Appropriation made by common council of the city board paying salary of 1 nurse employed by Visiting Nurse Assn. Nurse gives part time to station, which is open 2 afternoons a week.

⁶ July, 1914, to February, 1915.

⁷ 1 school nurse; 1 social worker.

⁸ The bureau of child hygiene cooperates with every private agency whose work it in any way touches.

⁹ Under 2 years of age.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.	Supporting an obstetrical clinic.			
x	x	x	x	x							1		x		1
x	x		x	x					2		2			x	2
x	x		x	x			1		1		1			x	3
x	x		x	x										x	4
							1		1		1		x		5
							1		1		1		x		6
	x						(⁵) 3		(⁵) 3		(⁵) 3		x		7
							1		1		1				8
							1		1		1		x		9
							1		1		1				10
							(²) 2		(²) 2		(²) 2			x	11
x	x		x											x	12
x	x	x	x											x	13
x	x	x	x	x										x	14
x	x	x	x											x	15
x	x	x	x											x	16
x	x	x	x											x	17
x	x	x	x											x	18
x	x	x	x											x	19
x	x	x	x											x	20
x	x	x	x											x	21
x	x	x	x											x	22
x	x	x	x											x	23
x	x	x	x											x	24
x	x	x	x											x	25
x	x	x	x											x	26
x	x	x	x											x	27
x	x	x	x											x	28
															29
															30
															31
															32
															33
															34
															35
x	x												x		36

¹³ In summer; number in winter, 18.

¹⁴ School nurses.

¹⁵ Nurses follow up all cases reported by midwives.

¹⁶ Composed of 80 organizations whose work touches directly or indirectly upon the welfare of babies. Acts as a clearing house in facilitating cooperation among all infant-welfare agencies.

¹⁷ Work carried on by Fordham Hospital.

¹⁸ Not available for infants under 1 year of age.

¹⁹ In summer; in winter, 1.

²⁰ Between mothers and nurses.

²¹ See Bellevue and Allied Hospitals.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

	State and city.	Agency.	Infant-welfare stations.								
			Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.				
			Summer.	Winter.			Sum-mer.		Winter.		
							Full time.	Part time.	Full time.	Part time.	
	NEW YORK—contd.										
1	New York—Contd.	Good Samaritan Dispensary, Essex and Broome Sts.	1	1	680	3	2		2		
2	(Broux and Manhattan Boroughs—Continued).	Gouverneur Hospital, social service department, foot of Gouverneur St.									
3		Harlem Hospital, visiting nurse department, ¹ One hundred and thirty-sixth St. and Lenox Ave.									
4		Henry Street Settlement, 265 Henry St.	1	1	² 518	3	1	1	1	1	
5		Lebanon Hospital, social service department, Westchester and Caldwell Aves.	1	1	573	2	2		2		
6		Little Missionaries' Day Nursery, ³ 93 St. Mark's Place.									
7		Madison Square Church House, ³ 432 Third Ave.									
8		Manhattan Maternity and Dispensary, 327 E. Sixtieth St.									
9		Manhattanville Nursery Assn., ³ 401 W. One hundred and twenty-seventh St.									
10		Metropolitan Hospital, Blackwell's Island.									
11		Mount Sinai Hospital, social service department, One hundredth St. and Fifth Ave.	1	1	² 349		2		2		
12		Nathan Straus Pasteurized Milk Laboratories, 348 E. Thirty-second St.	¹⁷	⁸		1					
13		New York Assn. for Improving the Condition of the Poor, 105 E. Twenty-second St.									
14		New York City Mission Society, Woman's Branch, 105 E. Twenty-second St.									
15		New York Diet Kitchen Assn., 1 West Thirty-fourth St.	8	8	² 4,900	20	⁹		⁹		
16		New York Dispensary, 34 Spring St.	1	1	(¹)	1	1		1		
17		New York Hospital, ³ 8 W. Sixteenth St.	1	1	(¹)	(¹)	1		1		
18		New York Medical College and Hospital for Women, social service department, 191 W. One hundred and first St.									
19		New York Milk Committee Health Center, 119 Washington St.	1	1	(¹)	1	3		3		
20		New York Nursery and Child's Hospital, 161 W. Sixty-first St.	1	1	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	
21		New York Post Graduate Hospital, Twentieth St. and Second Ave.									
22		The Presbyterian Hospital, visiting nurse department, ³ Seventieth St. and Madison Ave.									
23		Recreation Room and Settlement, 186 Chrystie St.									

¹ Number not supplied.² Work reported. Detailed information not available.³ Under 2 years of age.⁴ Includes 1 social worker.⁵ Services of student nurses available.⁶ Pasteurized milk laboratories.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					Supporting an obstetrical clinic.
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.				
×	×			×	×					(1)	(1)	×	.....	×	1
×	×			×							1	.....	.....	×	2
.....															3
.....															4
.....															5
.....															6
.....															7
.....															8
.....															9
.....															10
×	×														11
×															12
.....															13
.....															14
.....															15
.....															16
.....															17
.....															18
.....															19
.....															20
.....															21
.....															22
.....															23

¹ Between physicians and mothers only.

² In addition, 9 matrons and 7 assistant matrons. Some assistance by health-department nurses in summer.

³ Work with children is simply in connection with wards and clinics of the hospital and is one branch of the social service department.

⁴ Woman physician who cooperates with New York Diet Kitchen Assn.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

[Sign (X) signifies that some work is

State and city.		Agency.	Infant-welfare stations.								
			Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.				
			Summer.	Winter.			Sum-mer.		Winter.		
							Full time.	Part time.	Full time.	Part time.	
NEW YORK—contd.											
1	New York—Contd.	Riverdale Health League, 254 River-									
2	(Bronx and Manhat-	dale Ave., Riverdale.									
	tan Boroughs—	St. Luke's Hospital, social service									
	Continued).]	department, One hundred and									
3		thirteenth St.									
4		St. Thomas' Chapel, ¹ 230 E. Six-									
		tieth St.									
5		Sloane Hospital for Women, social									
		service department, Fifty-ninth St.									
6		and Tenth Ave.									
		Sunnyside Day Nursery, 221 E. One									
7		hundred and fourth St.									
		Washington Heights Hospital, social									
8		service department, ¹ 554 W. One									
		hundred and sixty-fifth St.									
9	(Brooklyn Borough)	Brooklyn Children's Aid Society, ¹									
		72 Schermerhorn St.									
10		Brooklyn Hospital, social service de-									
		partment, De Kalb Ave. and Ray-									
11		mond St.									
12		Brooklyn Bureau of Charities, district									
		nursing committee, 80 Schermer-									
13		horn St.									
14		Greenpoint Settlement, 85 Java St.						* 1		* 1	
15		Lincoln Settlement, ¹ 105 Fleet St.									
16		Little Italy Neighborhood House, ¹									
		146 Union St.									
17		Long Island College Hospital, ¹ Henry									
18		St.									
19		St. Christopher's Hospital for Babies,									
20		283 Hicks St.									
21		Williamsburg Hospital, social service									
22		department, Bedford Ave. and									
23		S. Third St.									
24		Willow Chapel House, 27 Columbia Pl.	1	1	205	1	1			1	
25	Newburgh	Municipal.	1		146	(*)	1				
26	Niagara Falls	do.	1	1	160	1	1			1	
27	North Tonawanda	do.									
28		Infant Welfare Society	1		(*)	(*)			1		
29	Ogdensburg	Municipal ¹	(*)	(*)							
30	Olean	do.									
31		Olean Visiting Nurse Assn., 457 N.	1	1	* 101	(*)	2			2	
32		Union St.									
33	Oswining	Municipal.	(*)	(*)			(*)			(*)	
34		District Nursing Assn., 25 Ann St.									
35	Oswego	Municipal.									
36		Metropolitan Life Insurance Co., visit-									
37		ing nurse, 100 E. First St.									
38	Peekskill	Municipal.									
39		Associated Charities, infant-welfare	1	1	* 97	(*)	1	2		1	
40		committee.									
41	Plattsburg	Municipal.	1	1	(*)		1	1		1	
42	Port Chester	do.									
43		Woman's Club, ¹ 38 Broad St.									
44	Poughkeepsie	Municipal.	3	1	(*)		4	3		1	
45	Rensselaer	do.									

¹ Work reported. Detailed information not available.² Assists nurses in health department station in Greenpoint in work among Polish mothers.³ General cooperation by physicians.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

75

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					Supporting an obstetrical clinic.
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.				
							1		1		1				1
							1		1		1				2
															3
							3		3		3	×	×		4
							1		1			×			5
															6
															7
							2		2		2				8
							33		33		28		×		9
	×										1				10
															11
															12
							1		1		1				13
							1		1		1				14
															15
×	×	×	×	×	×						1				16
×	×		×	×	×										17
															18
															19
															20
													(1)	(1)	21
×	×		×									×	×	×	22
															23
													×	×	24
							1		1						25
							1		1						26
															27
×	×		×						1		1				28
×	×	×	×												29
×	×	×	×	×			(1)		(1)						30
															31
															32
							1		1				×		33
															34

* Number not supplied.

• From Oct. 1, 1914, to Apr. 27, 1915.

• From July 27, 1914, to Apr. 27, 1915.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

		Infant-welfare stations.							
State and city.	Agency.	Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
		Summer.	Winter.			Summer.		Winter.	
						Full time.	Part time.	Full time.	Part time.
NEW YORK—contd.									
1 Rochester.....	Municipal.....	13		2,351	3	17		8	
2	Rochester General Hospital, social service department.	1	1	(1)	(1)		1		1
3 Rome.....	Municipal.....								
4 Saratoga Springs.....	do.....								
5 Schenectady.....	do.....	1	1	200	2	2		2	
6 Syracuse.....	do.....	1		(1)	(5)	5			
7	Infant Welfare Assn., 600 E. Genesee St.	3	1	850	8	8	3	1	
8	Solvay Infant Welfare Assn., 600 E. Genesee St.	1		83	(2)	1			
9	Visiting Nurse Assn. of Syracuse, 511 S. Warren St.								
10 Troy.....	Municipal.....								
11	Instructive District Nursing Assn., 1600 Seventh Ave.								
12 Utica.....	Municipal.....								
13	Baby Welfare Committee of Utica, 511 Varick St.	3	3	434	8	3		2	
14 Watertown.....	Municipal.....								
15	Bureau of Charities and Society for Prevention of Cruelty to Children, 224 Massey Ave.								
16	Visiting Nurse Assn., 113 Park Pl.								
17 Watervliet.....	Municipal *.								
18 White Plains.....	do.....	1		45	1		1		
19	White Plains Nursing Assn.,* 53 Hamilton Ave.								
20 Yonkers.....	Municipal.....								
21	Milk Committee *.	4	4	1,097	14	4		4	
22	Yonkers Homeopathic and Maternity Hospital.*								
NORTH CAROLINA.									
23 Asheville.....	Municipal.....								
24	Flower Mission and Associated Charities and Free Medical Dispensary.	1	1	24	3		1		1
25 Charlotte.....	Municipal.....								
26 Durham.....	do.....								
27 Greensboro.....	do.....								
28	Associated Charities.....								
29	Proximity Manufacturing Co., welfare department, White Oak Mills.								
30 Raleigh.....	Municipal.....								
31 Wilmington.....	do.....								
32	King's Daughters.....								
33	Red Cross Society *.								
34 Winston.....	Municipal.....								
35	Wayside Workers.....								
NORTH DAKOTA.									
36 Fargo.....	Municipal.....								
37	Associated Charities of Fargo, City Hall.								
38 Grand Forks.....	Municipal.....								
39	Associated Charities.* City Hall								

* Number not supplied.

* No information supplied.

* In summer; 1 in winter.

* Board of Education in cooperation with Baby Welfare Committee of Utica.

* Work reported. Detailed information not available.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

77

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Supporting an obstetrical clinic.	Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.						
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					
×	×	×	×	×	×					1	8		×	×	×	1
×	×	×	×	×	×											2
×	×	×	×	×	×								×	×	×	3
×	×	×	×	×	×										×	4
×	×	×	×	×	×										×	5
×	×	×	×	×	×										×	6
×	×	×	×	×	×										×	7
×	×	×	×	×	×										×	8
×	×	×	×	×	×										×	9
×	×	×	×	×	×										×	10
×	×	×	×	×	×										×	11
×	×	×	×	×	×										×	12
×	×	×	×	×	×										×	13
×	×	×	×	×	×										×	14
×	×	×	×	×	×										×	15
×	×	×	×	×	×										×	16
×	×	×	×	×	×										×	17
×	×	×	×	×	×										×	18
×	×	×	×	×	×										×	19
×	×	×	×	×	×										×	20
×	×	×	×	×	×										×	21
×	×	×	×	×	×										×	22
×	×	×	×	×	×										×	23
×	×	×	×	×	×										×	24
×	×	×	×	×	×										×	25
×	×	×	×	×	×										×	26
×	×	×	×	×	×										×	27
×	×	×	×	×	×										×	28
×	×	×	×	×	×										×	29
×	×	×	×	×	×										×	30
×	×	×	×	×	×										×	31
×	×	×	×	×	×										×	32
×	×	×	×	×	×										×	33
×	×	×	×	×	×										×	34
×	×	×	×	×	×										×	35
×	×	×	×	×	×										×	36
×	×	×	×	×	×										×	37
×	×	×	×	×	×										×	38
×	×	×	×	×	×										×	39

¹ Supplies milk for municipal stations, furnishes physicians for clinics, organizes Little Mothers' Leagues.

² Under 2 years of age.

³ Affiliated with American Red Cross Town and Country Nursing Service. Work reported. Detailed information not available.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

State and city.	Agency.	Infant-welfare stations.							
		Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
		Summer.	Winter.			Sum-mer.		Winter.	
						Full time.	Part time.	Full time.	Part time.
OHIO.									
1 Akron.....	Municipal.....								
2	George T. Perkins Visiting Nurse Assn., 260 South High St.	1	1	(1)	(1)		4		4
3	Mary Day Nursery, ² Central Office Bldg.								
4 Alliance.....	Municipal.....	(2)	(2)						
5 Ashtabula.....	do.....								
6 Bellaire.....	do.....								
7 Cambridge.....	do.....								
8	Public Health League, Room 8, I. O. O. F. Bldg.								
9 Canton.....	Municipal.....								
10 Chillicothe.....	do.....								
11	Associated Charities.....								
12	Ross County Anti-Tuberculosis Society, 121 W. Main St.								
13 Cincinnati.....	Municipal (child hygiene division).....	9		758	11	¹⁴			
14	Children's Clinic of the Ohio-Miami Medical College, ⁴ McMicken and Elm Sts.	2	2	557	14	4		3	
15	Hospital Social Service Assn., Cincinnati Hospital.								
16	Jewish Settlement.....	(2)	(2)						
17	Maternity Society of the Protestant Episcopal Church, ⁵ 220 W. Seventh St.								
18	Union Bethel Settlement, 501 E. Third St.	1	1	(2)	²	2		1	
19	Visiting Nurse Assn. of Cincinnati, 220 W. Seventh St.								
20 Cleveland.....	Municipal (bureau of child hygiene), 2500 E. Thirty-fifth St.	16	16	6,525	²²	²³		38	
21	Babies' Dispensary and Hospital.....								
22	Maternity Hospital, ¹ 3735 Cedar Ave.								
23	St. Luke's Hospital, 6606 Carnegie Ave. SE.								
24	Visiting Nurse Assn. of Cleveland, 612 St. Clair Ave. NE.								
25	Western Reserve Maternity Dispensary (Lakeside Hospital), 3509 E. Thirty-fifth St. SE.								
26 Columbus.....	Municipal.....								
27	Instructive District Nursing Assn.....	6	6	1,105	5	11		11	
28	West Side Social Center, ¹² 511 W. Broad St.								
29 Dayton.....	Municipal.....								
30	Visiting Nurse Assn., 127 S. Ludlow St.	5	1	¹¹ ,526	6	¹²		¹⁰	
31 East Liverpool.....	Municipal.....								
32 Elyria.....	do.....								
33 Findlay.....	do.....								

¹ No information supplied.² Work reported. Detailed information not available.³ School nurses.⁴ Cooperates closely with Maternity Society of the Protestant Episcopal Church; supplies nursing service for out-patient department, Cincinnati Hospital.⁵ Nursing service supplied by Children's Clinic of the Ohio-Miami Medical College.⁶ Furnishes room for one of municipal stations.⁷ Nurses under supervision of Visiting Nurse Assn. of Cincinnati; cooperates closely with Children's Clinic of the Ohio-Miami Medical College.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

79

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Supporting an obstetrical clinic.	Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.						
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					
X	X			X									X	X	X	1
																2
													X	X	X	3
																4
																5
							1		1					X	X	6
																7
															X	8
																9
							2		2		2			X		10
																11
X	X		X	X									X	X	X	12
																13
																14
							(⁵)		(⁵)	1		X		X		15
																16
																17
	X	X		X							1	X	X	X		18
							11		11		11			X		19
X	X	X	X	X	X						38		X	X	X	20
							(¹²)		(¹²)	1		X		X		21
							35		35		35			X		22
																23
						7	1	7	1	2		X		X		24
																25
X	X	X	X								11		X	X	X	26
																27
																28
X	X		X	X	X						12			X	X	29
																30
													X		X	31
															X	32
															X	33

¹ Number not supplied.

² Resident; including nonresident, 9.

³ 2 additional during 3 months.

⁴ 7 additional during 3 months.

⁵ By internes and student nurses.

⁶ Provides a room for one of the babies' clinics of the Instructive District Nursing Assn.

⁷ Under 2 years of age.

⁸ In addition, a visiting housekeeper is employed.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

[Sign (X) signifies that some work is

	State and city.	Agency.	Infant-welfare stations.							
			Num- ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
			Summer.	Winter.			Sum- mer.	Winter.	Sum- mer.	Winter.
			Full time.	Part time.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.
	OHIO—continued.									
1	Hamilton.....	Municipal.....								
2		Federated Charities, ¹ 237 S. Second St.								
3	Ironton.....	Municipal.....								
4	Lakewood.....	do.....								
5		Visiting Nurse Assn. ²								
6	Lancaster.....	Municipal.....								
7		Anti-Tuberculosis Society, 140 Khr Bldg.	1	1	28				1	1
8	Lima.....	Municipal.....								
9		Instructive Visiting Nurse Assn., 817 E. Elm St.								
10	Lorain.....	Municipal.....								
11	Mansfield.....	do.....								
12		Visiting Nurse Assn.....								
13	Marietta.....	Municipal.....								
14	Marion.....	do.....								
15		City Federation of Women's Clubs, 301 S. State St.	1		8	(9)			1	1
16		King's Daughters.....								
17	Massillon.....	Municipal.....								
18	Middletown.....	do.....								
19		Social Service Bureau, 512 E. Third St.								
20	Newark.....	Municipal.....								
21	Norwood.....	do.....								
22	Piqua.....	do.....								
23	Portsmouth.....	do.....								
24	Sandusky.....	do.....								
25	Springfield.....	do.....								
26		Babies' Milk Dispensary and Fresh Air Camp, 353 E. High St.	2		110	4	1	3		
27	Steubenville.....	Municipal.....								
28	Tiffin.....	do.....								
29	Toledo.....	do.....	3	3	244	1	3		3	
30		Toledo District Nurse Assn., 1517 Mon- roe St.	1	1	300	2		15		15
31	Warren.....	Municipal.....								
32	Youngstown.....	do.....								
33		Youngstown Sheet & Tube Co., East Youngstown.								
34		Visiting Nurse Assn., 102 E. Front St.								
35		Youngstown Hospital Dispensary, Francis St.								
36	Zanesville.....	Municipal.....								
	OKLAHOMA.									
37	Chickasha.....	Municipal.....								
38	Enid.....	do.....								
39	Guthrie.....	do.....								
40	McAlester.....	do.....								
41		Visiting Nurse Assn. ¹								

¹ No information supplied.² Work conducted by Visiting Nurse Assn. of Cleveland.³ Between mothers and nurses.⁴ Work reported. Detailed information not available.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

81

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.		
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.						
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.					Supporting an obstetrical clinic.
	(5)	X		X				1								1
																2
																3
																4
																5
																6
																7
																8
																9
																10
																11
																12
																13
																14
																15
	X	X		X												16
																17
																18
																19
																20
																21
																22
																23
																24
	X	X		X												25
																26
																27
	X	X		X	X											28
																29
																30
																31
																32
																33
																34
																35
																36
																37
																38
																39
																40
																41

⁵ From Apr. 1 to June 30, 1915.

⁶ Number not supplied.

⁷ From Jan. 1 to Apr. 1, 1915.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work

		Infant-welfare stations.							
State and city.	Agency.	Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
		Summer.	Winter.			Summer.		Winter.	
						Full time.	Part time.	Full time.	Part time.
OKLAHOMA—contd.									
1	Muskogee.....	Municipal.....							
2	Oklahoma City.....	do.....							
3		Provident Assn. ¹							
4	Shawnee.....	Municipal.....							
5	Tulsa.....	do.....							
OREGON.									
6	Portland.....	Municipal.....							
7	Salem.....	do.....							
PENNSYLVANIA.									
8	Allentown.....	Municipal.....							
9	Altoona.....	do.....							
10		East Side Sunshine Society, 507 Second St.							
11	Beaver Falls.....	Municipal.....							
12	Bethlehem.....	do.....							
13	Braddock.....	do.....							
14	Bradford.....	do.....							
15	Butler.....	do.....							
16		Women's Industrial Club.....							
17	Carbondale.....	Municipal.....							
18	Carlisle.....	do.....							
19	Carnegie.....	do.....							
20	Chambersburg.....	do.....							
21	Chester.....	do. ¹							
22	Coatesville.....	do.....							
23	Columbia.....	do. ¹							
24	Connellsville.....	do.....							
25	Dubois.....	do.....							
26	Dunmore.....	do.....							
27	Duquesne.....	do. ¹							
28	Easton.....	do.....							
29		St. John's Lutheran Church, 330 Ferry St.							
30	Erie.....	Municipal.....							
31		Visiting Nurse Assn., 522 German St.	1	1	240	(4)	5		4
32	Farrell ²	Municipal.....							
33	Greensburg.....	do.....							
34	Harrisburg.....	do.....							
35		Visiting Nurse Assn., 1109 Green St.	1		(4)	2	1		
36	Hazleton.....	Municipal.....							
37		United Charities of Hazleton, 17 S. Wyoming St.							
38	Homestead.....	Municipal.....							
39	Johnstown.....	do.....							
40		Associated Charities of Greater Johnstown, 3 Hannan Bldg.	2		40	3	1	1	
41		Cambria County Civic Club.....							
42	Lancaster.....	Municipal.....							
43	Lebanon.....	do.....							
44		Visiting Nurse Assn., City Hall.....							

¹ No information supplied.² Work reported. Detailed information not available.³ Additional nurses employed from time to time.⁴ Number not supplied.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.	Supporting an obstetrical clinic.			
							1		1					X	1
							1		1					X	2
														X	3
														X	4
														X	5
														X	6
														X	7
						(2)		(2)					X	X	8
						1		1		1				X	9
														X	10
															11
															12
															13
															14
							1		1		1		X	X	15
														X	16
														X	17
															18
															19
															20
															21
															22
														X	23
															24
															25
															26
							1		1		1		X	X	27
															28
															29
X	X		X	X	X	1		1		1	4		X	X	30
															31
															32
X	X		X							1					33
															34
							1		1		1				35
															36
															37
X	X	X	X	X					1				X		38
														X	39
									1		1				40
															41
									1		1			X	42
							1		1		1		X	X	43
													X		44

* Formerly South Sharon.

* Upon the invitation of the city a study of the milk supply was made by the Dairy Division, U. S. Department of Agriculture, May, 1913.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

State and city.	Agency.	Infant-welfare stations.							
		Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
		Summer.	Winter.			Summer.		Winter.	
						Full time.	Part time.	Full time.	Part time.
PENNSYLVANIA—continued.									
1 McKees Rocks.....	Municipal.....								
2 McKeesport.....	do.....								
3 Mahanoy City.....	do.....								
4 Meadville.....	do.....								
5	Visiting Nurse Assn., 691 Highland Ave.								
6 Monessen.....	Municipal.....								
7	Board of Charities ¹								
8 Mount Carmel.....	Municipal.....								
9 Nanticoke.....	do.....								
10 New Castle.....	do.....								
11	Visiting Nurse Assn., ² 319 Minter Ave.								
12 Norristown.....	Municipal.....								
13	Associated Charities, 325 Swede St.								
14 North Braddock.....	Municipal.....								
15 Oil City.....	do.....								
16 Old Forge.....	do.....								
17 Philadelphia.....	Municipal (division of child hygiene).	44	44	(³)	(³)	18		18	
18	Babies' Welfare Assn., ⁴ City Hall	81	81	235	2	2		2	
19	Child Federation, ⁵ Weightman Bldg.	112	112	289	2	3	1	3	1
20	Babies' Hospital, 609 Addison St.								
21	Henry Phipps Institute, ⁶ Seventh and Lombard Sts.								
22	Baptist Settlement House, 1156 Pass-yunk Ave.	1	1	(⁷)	1	1		1	
23	Children's Homeopathic Hospital, Franklin and Thompson Sts.	1	1	500	31	6		6	
24	Children's Hospital, social service department, 210 S. Van Pelt St.	13	13		7		(14)		(14)
25	Cohocksink Mothers' Club, school-house, Fourth St. and Montgomery Ave.	1	1	100	2		(14)		(14)
26	Community House, ⁸ 1530 S. Second St.								
27	Douglas Hospital, social service department, 1530 Lombard St.								
28	Episcopal Hospital, social service department, Front St. and Lehigh Ave.								
29	Frankford Hospital, social service department, Frankford and Wakeling Sts.								
30	Friends' Neighborhood Guild, ⁹ Fourth and Green Sts.	(15)	(15)						
31	Hahnemann Hospital, social service department, Fifteenth and Race Sts.								
32	Howard Hospital, social service department, Broad and Catherine Sts.								

¹ Work reported. Detailed information not available.² Limited. By volunteer inspectors.³ No information supplied.⁴ Prophylactic clinics. Held once a week in winter; every day in summer.⁵ Originally conducted as an experiment by the Child Federation; now part of the school curriculum.⁶ Centralizing agency, composed of organizations interested in the care of babies and children, and having for its purpose the avoidance of duplication of work and the formulation of a comprehensive program of baby work.⁷ Formerly the Child Hygiene Committee. As reorganized, its purpose is actively to advance, by original and constructive methods, the best interests of babies and children in Philadelphia.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

85

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					Supporting an obstetrical clinic.
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.				
							3		2				×		×
								1	1		1			×	
×	×	×	×	(8)	(10)						18		×		
×	×	×	×	×							1		×		
										1			{	×	
×	×	×	×	×	×						2	×	×	×	
×	×	×	×								(14)	×		×	
×	×	×	×								(14)		×	×	
											(14)	×			
						1		1			1	×			
						10 1		10 1			10 1	×		×	
							1		1		1	×			
						6		3			3			×	

⁸ Experimental health center.

^b Designated as field workers; in addition, 1 stenographer, 1 interpreter, and 1 caretaker.

* Milk not dispensed, but sanitary inspection made of all milk shops in 25 city blocks surrounding the center

¹¹ 1 prophylactic, 1 "sick" clinic.

¹² Cooperates with Babies' Hospital in prenatal work.

¹⁸ Health clinic.

¹⁴ General nursing staff.

15 Work in charge of city nurses.

¹⁰ Social worker with medical training.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

State and city.	Agency.	Infant-welfare stations.							
		Num- ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
		Summer.	Winter.			Sum- mer.		Winter.	
						Full time.	Part time.	Full time.	Part time.
PENNSYLVANIA— continued.									
1 Philadelphia (con.)	Jefferson Hospital, social service department, Tenth and Sansom Sts.								
2	Medico-Chirurgical Hospital, social service department, Eighteenth and Cherry Sts.								
3	Methodist Episcopal Deaconesses' Home, 611 Vine St.	1	1	(1)	1	1		1	
4	Mothers' Community House, 1401 S. Front St.	1	1	(1)	(1)	2		2	
5	Mt. Sinai Hospital, Fifth and Reed Sts.	1	1	145	2		(1)		(2)
6	Osteopathic Society, 410 S. Ninth St.	2	2	50	3	1		1	
7	Pennsylvania Hospital, social service department, Eighth and Spruce Sts.								
8	Philadelphia General Hospital, social service department, Thirty-fourth and Pine Sts.								
9	Polyclinic Hospital, social service department, Eighth and Lombard Sts.								
10	Presbyterian Hospital, social service department, Thirty-ninth and Filbert Sts.	1	1	* 263	1	1		1	
11	Roosevelt Hospital, social service department, 710 N. Fifth St.	1		(1)	4	(1)	(1)		
12	Samaritan Hospital, social service department, 3403 N. Broad St.								
13	St. Christopher's Hospital for Children, social service department, Lawrence and Huntington Sts.	1	1	400	4	3		3	
14	Southwark Neighborhood House, ⁴ 101 Ellsworth St.								
15	Starr Center Assn., 725 Lombard St.	1	1	* 805	2	3		3	
16	University of Pennsylvania Settlement House, Twenty-sixth and Lombard Sts.	1	1	25	3	1		1	
17	University of Pennsylvania Hospital, social service department, Thirty-fourth and Spruce Sts.								
18	Visiting Nurse Society of Philadelphia, 1340 Lombard St.								
19	West Philadelphia Hospital for Women, social service department, 4035 Parrish St.								
20	Woman's Hospital, social service department, 2137 N. College Ave.	1	1	(7)	6	1		1	
21	Woman's Southern Homeopathic Hospital, social service department, 739 S. Broad St.								
22 Phoenixville	Municipal ¹								
23 Pittsburgh	Municipal (bureau of child welfare)...	20	7	2,771	10	15			15
24	Babies Dispensary of the Tuberculosis League, 2857 Bedford Ave.	2	2	3,000	2	4		4	
25	Pittsburgh Maternity Dispensary, ⁵ 3406 Fifth Ave.								

¹ No information supplied.² Between mothers and nurses.³ General nursing staff.⁴ Work reported. Detailed information not available.⁵ Under 2 years of age.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.

being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.				Supporting an obstetrical clinic.
						1		1							1
						1	1	1	1		1			×	2
×	×				×						1			×	3
×	×										2			×	4
×	×	×									(2)		×	×	5
															6
															7
						(4)		(4)		(4)	(4)				8
															9
	×		×												10
×		×								(4)	(4)	×	×	×	11
						1		1			1	×	×	×	12
×	×												×	×	13
															14
×	×	×		×							1			×	15
×	×			×							1			×	16
						1		1							17
						(4)	(4)	(4)	(4)	(4)	(4)				18
											(4)	×			19
×	×		×	×	×					(7)	(7)	×	×	×	20
							1		1		1				21
															22
×	×	×	×	×	×						15		×	×	23
×	×				×										24
										1	4	×	×	×	25

⁶ Work incidental to general nursing work.

⁷ Number not supplied.

⁸ Social worker.

⁹ Maintains prenatal clinic in 8 different sections of the city.

TABULAR STATEMENT OF INFANT-WELFARE WORK.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

State and city.		Agency.	Infant-welfare stations.								
			Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.				
			Summer.	Winter.			Sum-mer.		Winter.		
							Fulltime.	Parttime.	Fulltime.	Parttime.	
PENNSYLVANIA—continued.											
1	Pittston	Municipal									
2		Visiting Nurse Assn. of Pittston and West Pittston, 50½ S. Main St.									
3	Plymouth	Municipal									
4	Pottstown	do.									
5	Pottsville	do.									
6	Reading	do.									
7		Visiting Nurse Assn., 4291 Walnut St.	24	31	202	12		6		6	
8	Scranton	Municipal									
9	Shamokin	do.									
10		Shamokin Visiting Nurse Assn., 800 E. Sunbury St.									
11	Sharon	Municipal ²									
12	Shenandoah	do.									
13	South Bethlehem	do.									
14	Steelton	do.									
15		Civic Club									
16	Sunbury	Municipal									
17		Organized Charity Committee ⁴									
18	Uniontown	Municipal									
19	Warren	do.									
20	Washington	do.									
21	West Chester	do.									
22	Wilkes-Barre	do.									
23		Visiting Nurse Assn., 40 N. Washington St.	2	2	194	(-)		6		6	
24	Wilkesburg	Municipal									
25	Williamsport	do.									
26	York	do.									
27		Visiting Nurse Assn., 800 E. Market St.	1	1	125	2	3		2		
RHODE ISLAND.											
28	Central Falls	Municipal									
29	Cranston (post-office, Providence)	do.									
30		Cranston Anti-Tuberculosis Assn., 49 Nichols St.	1	1				2		2	
31	Cumberland	Municipal									
32	East Providence	do.									
33		District Nursing and Anti-Tuberculosis Assn., 18 Taunton Ave.	1	1	(-)	1		2		2	
34	Newport	Municipal									
35		Newport Hospital, visiting nurse department.									
36	Pawtucket	Municipal									
37		Associated Charities, 209 Oak Hall	1	1	301	2	1		1		
38		Visiting Nurse Assn., 209 Oak Hall	1	1	217	1	1		1		
39	Providence	Municipal (division of child hygiene)							2		
40		Providence District Nursing Assn., 109 Washington St.	5	5	2,980	(+)	69		7		
41		Baby Welfare Committee ⁵									
42	Warwick	Municipal ⁴									
43		Warwick Health League, Apponaug									

¹ Work reported. Detailed information not available.² Station open one afternoon each week.³ No information supplied.⁴ Provides milk for poor and sick babies. Mothers given instruction. No nurses.⁵ Number not supplied.⁶ For period of 8 months.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Supporting an obstetrical clinic.	Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.		
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.							
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.						
																	1
							3		3		3						2
																	3
							1		1				×	×	×		4
	×	×	×														5
																	6
																	7
							1		1		1			×			8
																	9
																	10
																	11
																	12
																	13
							1		1					×			14
																	15
																	16
																	17
																	18
																×	19
																	20
	×	×	×								5		×		1	×	21
																	22
																	23
																	24
	×	×	×		×						3			×			25
																	26
																	27
																×	28
																	29
	×	×		×							2			×			30
																	31
	×	×	×	×							2			×	×		32
																	33
																×	34
							3		3					×			35
																	36
	×	×	×								1				×		37
	×	×	×								1						38
													×	×	×		39
											7					×	40
																	41
																	42
							1		1		1						43

¹ Includes 2 school nurses.

² Age not specified.

³ Composed of representatives from the health department, Providence District Nursing Assn., Providence Branch, Congress of Mothers, Council of Jewish Women, Immigration Education Assn., and Federal Hill Assn.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

[Sign (X) signifies that some work is

			Infant-welfare stations.							
State and city.		Agency.	Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
			Summer.	Winter.			Summer.		Winter.	
							Full time.	Part time.	Full time.	Part time.
RHODE ISLAND—CON.										
1	Woonsocket.....	Municipal.....								
2		Woonsocket Anti-Tuberculosis Assn. and District Nursing Assn., 194 Main St.								
SOUTH CAROLINA.										
3	Charleston.....	Municipal.....								
4	Columbia.....	do.....								
5		Columbia Children's Clinic ¹								
6	Greenville.....	Municipal.....								
7		Children's Charity Circle, ² 406 Arlington Ave.								
8	Spartanburg.....	Municipal.....								
9		Health League.....								
SOUTH DAKOTA.										
10	Aberdeen.....	Municipal.....								
11	Sioux Falls.....	do.....								
TENNESSEE.										
12	Chattanooga.....	Municipal.....								
13	Jackson.....	do.....								
14	Knoxville.....	do.....								
15		Child's Free Clinic ³	1	1	(⁴)	7	12	1		1
16	Memphis.....	Municipal.....	1	1	2,300	7	11			5
17		Associated Charities.....								
18	Nashville.....	Municipal (bureau of infant welfare).....	4	4	(⁵)	4	4		4	
TEXAS.										
19	Austin.....	Municipal.....								
20	Beaumont.....	do.....								
21	Brownsville.....	do.....								
22	Cleburne.....	do. ⁶								
23	Dallas.....	do.....								
24		Infants' Welfare and Milk Assn. of Dallas, 1307 Southerstone Life Bldg.	2	2	1,130	8	2		2	
25	Denison.....	Municipal ⁶								
26	El Paso.....	do.....								
27		Woman's Charity Assn., ⁶ 405 S. Campbell St.								
28	Fort Worth.....	Municipal.....								
29		Visiting Nurse Assn. ⁶								
30	Galveston.....	Municipal.....								
31	Houston.....	do.....	(¹)							
32		Houston Settlement Assn., 61 Gabel St.	1	1	250	10	2	1	2	1
33		Social Service Federation, Court-house.								
34	Laredo.....	Municipal.....								
35	Marshall.....	do.....								
36		Civic Club ⁶								
37	Palestine.....	Municipal.....								
38	Paris.....	do.....								

¹ Work reported. Detailed information not available.² Affiliated with American Red Cross Town and Country Nursing Service.³ Services discontinued.⁴ By school nurse.⁵ Children under 12 years of age received.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.				Supporting an obstetrical clinic.
							1		1		1				×
						(1)		(1)							
							1		1		1			×	7
							1		1					×	8
															9
													×		10
														×	11
	×													×	12
														×	13
	×													×	14
														×	15
														×	16
	×	×		×						1	3	×		×	17
											4	×		×	18
													×		

* Number not supplied.
 † Includes 6 school nurses.
 ‡ No information supplied.
 § Age not specified.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

State and city			Agency.			Infant-welfare stations.								
						Number.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.				
						Summer.	Winter.			Summer.		Winter.		
										Full time.	Part time.	Full time.	Part time.	
TEXAS—continued.														
1	San Angelo.....	Municipal.....												
2	San Antonio.....	do.....												
3	Sherman.....	do. ¹												
4	Temple.....	do.....												
5	Texarkana ¹	do.....												
6	Tyler.....	do. ¹												
7	Waco.....	do. ¹												
UTAH.														
8	Ogden.....	Municipal.....												
9	Salt Lake City.....	do.....	5	1	(²)	*1	6							
10		Neighborhood House ¹												
VERMONT.														
11	Barre.....	Municipal.....												
12	Burlington.....	do.....												
13		Visiting Nurse Assn., 174 Pearl St.....	1	1	125	1	2					3		
14	Rutland.....	Municipal.....												
15		Missionary Assn., Mead Bldg.....												
VIRGINIA.														
16	Alexandria.....	Municipal.....												
17		Instructive Visiting Nurse Society ¹												
18	Danville.....	Municipal.....												
19		The Ministering Circle of King's Daughters, 101 Mount Vernon Ave.												
20		Wesley House, ¹ Upper St.....												
21	Lynchburg.....	Municipal.....												
22	Newport News.....	do.....												
23	Norfolk.....	do.....												
24		King's Daughters Visiting Nurse Assn., 314 W. Freemason St.	2	2	(²)	2	4	*5	4	*5				
25	Petersburg.....	Municipal.....												
26	Portsmouth.....	do. ¹												
27	Richmond.....	do.....												
28		Visiting Nurse Assn., 223 S. Cherry St.												
29	Roanoke.....	Municipal.....												
30	Staunton.....	do.....												
31		Community Welfare League.....												
WASHINGTON.														
32	Aberdeen.....	Municipal.....												
33	Bellingham.....	do.....												
34	Everett.....	do.....												
35		Snohomish County public health nurse, county commissioner's office.												
36	North Yakima.....	Municipal.....												
37	Seattle.....	Municipal (child welfare division) ¹												
38		Deaconess Settlement, 1519 Rainier Ave.												
39		Fruit and Flower Mission, 52 Cobb Bldg.	1	1	(²)	1	1					1		
40		King County public health nurse, ² 510 Cobb Bldg.												

¹ No information supplied.² See Texarkana, Ark.³ Number not supplied.⁴ 1 regular; 2 additional when needed.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.			Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.						
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.	Supporting an obstetrical clinic.				
																1
																2
																3
																4
																5
																6
																7
																8
	x			x										x		9
																10
																11
																12
																13
									1		1			x		14
																15
																16
																17
																18
																19
																20
									2		2			x		21
																22
	x															23
																24
																25
																26
																27
																28
																29
																30
									1		1			x		31
																32
																33
																34
									1		1					35
																36
																37
																38
x																39
	x															40

^a Work reported. Detailed information not available.

^b School nurses.

^c Chiefly employed in regulation and improvement of boarding homes for children.

^d Association supports a mothers' training school.

TABLE 1.—*Infant-welfare work by municipal and private agencies in cities*

(Sign (X) signifies that some work is

			Infant-welfare stations.							
State and city.		Agency.	Num-ber.		Infants under 1 year cared for previous year.	Doctors on staff.	Nurses.			
			Summer.	Winter.			Sum-mer.		Winter.	
							Full time.	Part time.	Full time.	Part time.
WASHINGTON—contd.										
1	Spokane	Municipal								
2		Social Service Bureau, 415 Lindelle Bldg.								
3	Tacoma	Municipal								
4	Walla Walla	do.								
WEST VIRGINIA.										
5	Bluefield	Municipal								
6	Charleston	do.								
7	Huntington	do.								
-8	Martinsburg	do.								
9	Parkersburg	do. ¹								
10	Wheeling	do.								
WISCONSIN.										
11	Appleton	Municipal								
12	Ashland	do.								
13	Beloit	do.								
14		Beloit Visiting Nurse Assn., 1400 Fourth St.								
15	Eau Claire	Municipal								
16		Eau Claire Visiting Nurse Assn., 308½ S. Barstow St.								
17	Fond du Lac	Municipal								
18	Green Bay	do.								
19	Janesville	do.								
20		Civic League.								
21	Kenosha	Municipal								
22	La Crosse	do.								
23		Associated Charities of La Crosse, Courthouse.								
24	Madison	Municipal								
25		Visiting Nurse Assn., 322 S. Hamilton St.								
26	Manitowoc	Municipal								
27	Marquette	do.								
28	Milwaukee	Municipal (child welfare division)	7	4	2,220	25	15		15	
29		Infant Home and Hospital ¹								
30		Milwaukee Maternity Hospital and Free Dispensary Assn., 1529 Grand Ave.								
31	Oshkosh	Municipal								
32		Visiting Nurse Assn., 81 Main St.								
33	Racine	Municipal								
34	Sheboygan	do.								
35		Associated Charities, 721 Ontario Ave.								
36		Woman's Club, civics committee ¹								
37		Visiting Nurse Assn.								
38	Superior	Municipal								
39	Wausau	do.								
WYOMING.										
40	Cheyenne	Municipal ²								

¹ Work reported. Detailed information not available.² Nurse partly supported by private organizations. Names of organizations not supplied.³ No information supplied.

and towns having a population in 1910 of 10,000 and over, 1915—Continued.
being done in the field designated.]

Infant-welfare stations—Continued.						Instruction in infant hygiene in homes by nurses not connected with infant-welfare stations—Number of nurses.				Prenatal work.		Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.	City inspection of milk supply.	
Instruction given to mothers.				Milk dispensed.		Summer.		Winter.		Nurses.					Supporting an obstetrical clinic.
By conferences of doctors, mothers, and nurses.	In their own homes by nurses.	By classes and clubs.	By pamphlets, circulars, etc.	Whole.	Modified.	Full time.	Part time.	Full time.	Part time.	Full time.	Part time.				
							1		1		1				1
							1		1						2
											1				3
															4
															5
															6
							1		1						7
											1				8
															9
															10
															11
						1	1	1	2						12
							1		1		1				13
															14
															15
															16
							1		1						17
															18
							1		1						19
							(1)		(1)				×		20
													×	1	21
						3		3					×	1	22
															23
							1		1		1				24
															25
															26
×	×	×	×	×	×					2		×	×	×	27
						(1)	(1)	(1)	(1)	1		×	×	×	28
															29
															30
							1		1						31
							1		1		1				32
															33
							1		1		1				34
															35
							1		1		1				36
															37
							1		1						38
															39
															40

¹ 4 school nurses in addition.
² School nurse.

TABLE 2.—*Examples of infant-welfare work in cities and towns having a population in 1910 of less than 10,000, 1915.*

State and city.	Agency.	Infant-welfare stations.		Instruction in homes— Number of nurses.		Prenatal work by nurses, part time.	Little Mothers' League or classes.	Work by nurses to prevent infant illness.
		Number.	Nurses.	Number of nurses.	Number of nurses.			
Summer.	Winter.	Fulltime.	Parttime.	Fulltime.	Parttime.			
Alabama:								
Clanton.....	Chilton County Health Committee ¹					1	1	X
Arizona:								
Jerome.....	Yavapai County nurse ²					1	1	
California:								
Monrovia.....	Visiting Nurse Assn.....					1	1	
Connecticut:								
Brantford.....	Brantford Visiting Nurse Assn.....					1		
Canaan.....	North Canaan Visiting Nurse Assn ³					1	1	
Lime Rock ⁴	Lime Rock and Falls Village Visiting Nurses Assn.....					1	1	X
Litchfield.....	District Nursing Assn. ⁵	1	1	1			1	X
Rockville.....	Rockville Visiting Nurse Assn., 42 Elm St.....					1		
Florida:								
Miami.....	Woman's Relief Assn., 218 Twelfth St.....					1	1	X
Georgia:								
La Grange.....	La Grange Settlement.....					1	1	X
Illinois:								
Kewanee.....	Civic Nurse Board of Kewanee Woman's Club.....	1	1	1			1	X
Ottawa.....	Ottawa Public Health nursing organization. ⁶					1	1	
Winnetka.....	Relief and Aid Society of Winnetka.....					1	1	X
Kentucky:								
Benham.....	Y. M. C. A.....					1	1	
Fulton.....	Wisconsin Steel Co.....							
Hazard.....	City Health and Welfare League ⁷					1		
Maysville.....	Perry County Nursing Assn. ⁸					1	1	X
Pine Mountain.....	Mason County Public Health League ⁹					1	1	X
Maine:								
Kennebunk.....	Kennebunk Visiting Nurse Assn.....					2	2	X
Rumford.....	Rumford District Nursing Assn., Bank Bldg.....					3		X
Maryland:								
Cambridge.....	Cambridge Visiting Nurse Assn. ¹⁰					1	1	X
Massachusetts:								
Danvers.....	Danvers Visiting Nurse Assn., post-office box 144.....					(5)	(5)	X
Great Barrington.....	Visiting Nurse Assn.....	1	1	2			2	
Hamilton and Wenham.....	Visiting Nurse Committee of Hamilton and Wenham, post-office Union St., Hamilton.....					1	1	X
Holden.....	Holden Visiting Nurse Assn., post-office box 107.....					1	1	X
Lancaster.....	Lancaster Social Service Assn.....					1	1	X
Leicester.....	Leicester Samaritan Assn., post-office box 45.....					1		X
Manchester.....	Visiting Nurse Assn. ¹¹					1		
Medfield and Dover.....	Visiting Nurse Assn. of Medfield and Dover, post-office box 7, Medfield.....					1	1	
Middleboro.....	Middleboro District Nursing Assn.....					1	1	
Milton.....	Milton Visiting Nurse Assn.....					1	1	X
Needham.....	Visiting Nurse Assn., 101 Pickering St.....					1	1	X
Norwood.....	Norwood Civic Assn., 840 Washington St.....					2		X
Pepperell.....	Pepperell District Nurse Assn.....					1		
Rockland.....	Rockland Visiting Nurse Assn., 65 Vernon St.....					1		X
Stoughton.....	District Nurse Assn.....					1		X

¹ By nurses not connected with infant-welfare stations.² Affiliated with American Red Cross Town and Country Nursing Service.³ Nurse's district consists of 2 small villages and surrounding farms.⁴ Additional help by students in training in general hospital.⁵ Work reported. Detailed information not available.⁶ Baby-feeding clinic.⁷ 1 additional nurse in summer.

TABLE 2.—Examples of infant-welfare work in cities and towns having a population in 1910 of less than 10,000, 1915—Continued.

State and city.	Agency.	Infant-welfare stations.		Instruction in homes ¹ —		Prenatal work by nurses, part time.	Little Mothers' Leagues or classes.	Work by nurses to prevent infant blindness.		
		Num-ber.	Nurses.	Number of nurses.						
				Summer.	Winter.	Full time.	Part time.		Full time.	Part time.
Massachusetts—Con.										
Swampscott.....	Swampscott Visiting Nurse Assn., 6 New Ocean St.						1	1	×	×
Walpole.....	Walpole Visiting Nurse Assn., post-office box 207.						1	1		
Winchendon....	District Nurse Committee of the Winchendon Woman's Club, 142 Pleasant St.						1			
Michigan:										
Grosse Pointe Farms.	Mutual Aid and Neighborhood Club, ² 60 Oak St.	1	1		1		1			
Iron Mountain..	Pewabic Visiting Nurse, 406 West E St.						1	1		×
Minnesota:										
Faribault.....	Visiting Nurse Assn. ⁴									
Hibbing.....	Municipal.						1	1	×	×
Red Wing.....	Visiting Nurse Assn., 986 Central Ave.						1	1		
Rochester.....	Civic League, 406 S. Broadway						1	1		×
New Hampshire:										
Lebanon.....	Lebanon Visiting Nurse Assn., 31 High St.						1	1		×
Lisbon.....	Lisbon District Nursing Assn.						1			
New Jersey:										
Bernardsville...	Visiting Nurse Assn. of Somerset Hills ⁵						2	2		×
Dover.....	Woman's Civic Club, 5 Elizabeth St.						1			
Englewood.....	Babies Dispensary of Englewood Hospital, 22 Van Brunt St.	1	1	1				1		×
	Visiting Nurse Assn. of the Presbyterian Church, 41 E. Englewood Ave.							1	1	×
Franklin.....	Neighborhood House ⁶	1	1					1		×
Madison.....	Town Improvement Settlement House, 36 Main St.	1	1	(7)	(7)			(7)	×	×
Mount Holly....	Woman's League, 49 Grant St.						1	1		×
New York:										
Northern Westchester County territory divided into the following districts—										
Mount Kisco, Bedford Hills, Bedford, Pound Ridge, Middle Patent.	District Nursing Assn. of Northern Westchester County. ⁸						1	1		×
Katonah, Goldenbridge, North Salem, Purdys Station, Croton Falls, Somers, Somers Center, South Salem, Cross River, Lake Waccabuc, Lewisboro, Lindendale.	do.....						1	1		×

¹ By nurses not connected with infant-welfare stations.

² Additional nurse in summer.

³ Affiliated with American Red Cross Town and Country Nursing Service.

⁴ Work reported. Detailed information not available.

⁵ Rural area, comprising several small villages in a diameter of about 10 miles.

⁶ Weekly conference between mothers and nurses; babies weighed; mothers instructed.

⁷ Number not supplied.

⁸ Secretary of District Nursing Assn. of Northern Westchester County, Miss Della W. Marble, Bedford.

TABLE 2.—*Examples of infant-welfare work in cities and towns having a population in 1910 of less than 10,000, 1915—Continued.*

State and city.	Agency.	Infant-welfare stations.		Instruction in homes— Number of nurses.		Prenatal work by nurses, part time.	Little Mothers' League or classes.	Work by nurses to prevent infant blindness.
		Num-ber.	Nurses.	Number of nurses.				
				Summer.	Winter.				Full time.	Part time.
New York—Contd.								
Northern Westchester County, etc.—Con.								
Pleasantville, Briar Cliff, Briar Cliff Manor, and Sherman Park north of the bridge.	District Nursing Assn. of Northern Westchester County.					1	1	X
Yorktown Heights, Amawalk, Kitchawan, Elmsford, Eastview, West Somers, Baldwin Place.	do.					1	1	X
Chappaqua, Millwood, Hawthorne, Valhalla, Kensico, and Sherman Park south of the bridge.	do.					1	1	X
Cortlandt district includes the villages of Crugers, Montrose, Buchanan, Mohegan, Crum Pond, Verplanck, Oscawana, Oregon, Furnace Woods.	do.					1	1	X
Ossining, Sparta, and Scarborough	do.					1	1	X
Brewster	District Nursing Assn. of Southeast					1		X
Canandaigua	Canandaigua Health Assn., 28 Hallenbeck Bldg.					2	2	X
Dobbs Ferry, Irvington, and Ardsley.	Welfare Assn., Inc., 442 Broadway, Dobbs Ferry.					1	1	X
Harrison	Harrison District Nursing Assn.					1	1	
Hastings upon Hudson.	Infant-welfare station ² .	1	1					X
Herkimer	Municipal.	1	1				1	X
Islip town.	Islip Town Chapter of the American Red Cross Town and Country Nursing Service.					1		
Purchase	Purchase Visiting Nurse Assn. ³ .					1	1	X
Rhinebeck	Thompson House district nurse					1		
Roslyn	Roslyn District Nursing Assn., Roslyn Heights.					1	1	
Seneca Falls.	Infant-Welfare Assn. ⁴ .	1	1	1	1		1	X
Tarrytown and North Tarrytown.	Woman's Civic League of Tarrytown and North Tarrytown, 127 Wildey St.					1	1	X
Wappingers Falls.	Municipal.	1		1				X

¹ By nurses not connected with infant-welfare stations.² Maintained by private funds. In charge of health officer.³ Affiliated with American Red Cross Town and Country Nursing Service.⁴ Supported by public funds and private contributions.

TABLE 2.—*Examples of infant-welfare work in cities and towns having a population in 1910 of less than 10,000, 1915—Continued.*

State and city.	Agency.	Infant-welfare stations.		Instruction in homes— Number of nurses.		Prenatal work by nurses, part time.	Little Mothers' League or classes.	Work by nurses to prevent infant blindness.
		Num-ber.	Nurses.	Full time.	Part time.			
North Carolina:								
Altapass.....	Holman Association.....					1	1	×
Goldsboro.....	Goldsboro Benevolent Society.....					1	1	
Newbern.....	Anti-Tuberculosis Society, ² 90 Craven St.					1	1	
Whiterock.....	Presbyterian Board of Foreign Mis-sions. ³					1	1	×
Ohio:								
Circleville.....	Circleville Benevolent Assn., 114 W. Franklin St.					1	1	×
Cuyahoga Falls.	Visiting Nurse Committee ⁴					1	1	×
Fremont.....	Woman's Federation of Fremont.....					1		×
Pennsylvania:								
Darby.....	Visiting Nurse Fund for Darby and Vicinity, 117 Chestnut St.					1	1	×
Gettysburg.....	Visiting Nurse Assn., 54 E. Middle St.					1		
Haverford.....	Main Line Citizens Assn. (main line Pennsylvania R. R. from Radnor to Overbrook). ⁴					2	2	×
Huntsdale.....	Huntsdale Visiting Nurse Assn. ⁵					1	1	×
Kingston.....	West Side Visiting Nurse Assn., 470 Market St.					1	1	×
Muncy.....	Muncy Visiting Nurse Assn., 32 Green St.					1	1	
Palmerton.....	New Jersey Zinc Co. ⁶ (of Pennsyl-vania).					1	1	×
Wayne.....	The Neighborhood League (main line Pennsylvania R. R. from Radnor to Paoli), ⁶ Wayne Coffee House.					1		
Rhode Island:								
Bristol.....	Bristol Fortnightly Club, 631 Hope St.					1	1	
East Greenwich.	Visiting Nurse Assn. and Anti-Tuber-culosis Assn., 8, Main St.					1	1	×
North Kings-town.	Visiting Nurse and Anti-Tuberculosis Assn. of North Kingstown and Wick-ford (post office, Wickford).					1	1	×
Pascoag.....	Burrillville Anti-Tuberculosis Assn.....					1	1	×
Warren.....	Warren District Nursing Assn., 7 Lynden St.					1	1	
Vermont:								
Brattleboro.....	Brattleboro Mutual Aid Assn., 1 Canal St.					1	1	×
Montpelier.....	Montpelier Woman's Club, 138 State St.					1		×
Proctor.....	Proctor Hospital (Vermont Marble Co.).					3	(⁶)	×
Springfield.....	Golden Rule Circle of King's Daughters, 140 Summer St.					1	1	×
Windsor.....	Visiting Nurse Assn., Windsor St.					1	1	×
Virginia:								
Charlottesville..	Charlottesville Public Health and Nurse Assn., post-office box 36.					1	1	×
Hot Springs.....	Hot Springs Valley Nursing Assn., ³ post-office box 284.					1	1	×
Leesburg.....	Lena Morton Memorial nurse.....					1	1	×
Lexington.....	Civic League district nurse.....					1	1	×
Warrenton.....	Warrenton District Nurse Assn. ³					1	1	×
Winchester.....	District Nurse Assn., Farmers and Merchants Bank Bldg.					1	1	×

¹ By nurses not connected with infant-welfare stations.² Affiliated with American Red Cross Town and Country Nursing Service.³ Nurse works in a rural district covering about 50 square miles; work done in cooperation with American Red Cross Town and Country Nursing Service.⁴ Part of Philadelphia Visiting Nurse Assn. Affiliated with American Red Cross Town and Country Nursing Service.⁵ Mainly rural work.⁶ Limited.

TABLE 2.—*Examples of infant-welfare work in cities and towns having a population in 1910 of less than 10,000, 1915—Continued.*

State and city.	Agency.	Infant-welfare stations.		Instruction in homes— Number of nurses.		Prenatal work by nurses, part time.	Little Mothers' League or work by nurses to prevent infant blindness.		
		Number.	Nurses.	Number of nurses.	Number of nurses.				
		Summer.	Winter.	Full time.	Part time.			Full time.	Part time.
Washington: Mount Vernon..	Shaght County public health nurse, post-office box 583.	.....	.....	.....	.....	1	.....	X	.....
West Virginia: Clarksburg.....	Civic Club of Clarksburg, 363 Mechanic St.	.....	.....	.....	.....	(?)	(?)	.....	.....
Moundsville.....	Reynolds Memorial Hospital, social-service department, Third St.	.....	.....	.....	.....	1	1	.....	X
Wisconsin: Neenah and Menasha.	Visiting Nurse Assn. of Neenah and Menasha.	.....	.....	.....	.....	1	2	X	.....
Rhineland.....	Visiting Nurse Assn.	.....	.....	.....	.....	1	1	.....	X
Two Rivers.....	Ladies Charitable Assn., High School Bldg.	.....	.....	.....	.....	1	1	X	X

¹ By nurses not connected with infant-welfare stations.² Number not supplied.³ A Metropolitan Insurance nurse aids in this work.⁴ Organized by school nurse.TABLE 3.—*Milk inspection in certain cities and towns having a population in 1910 of 10,000 and over, 1915.*

State and city.	Population, 1910.	Country milk inspection.	Dairy farms.		Stores selling milk scored.	Bacteriological standards enforced.	Pasteurization ordinance.
			Scored.	Scored by card employed by Department of Agriculture.			
Alabama:							
Birmingham.....	132,685	X	X	X		X	
Mobile.....	51,521	X	X	1 X	X	X	
Arizona:							
Phoenix.....	11,134	X	X		X		
Tucson.....	13,193	X			X	X	
Arkansas:							
Little Rock.....	45,941	X	X	X	1 X	X	
California:							
Berkeley.....	40,434	X	X	X	X	X	X
Eureka.....	11,845					X	
Fresno.....	24,892	X				X	
Long Beach.....	17,809	X	X	X	X	X	
Los Angeles.....	319,198	X	X	1 X	X	(3)	
Oakland.....	150,174	X	X		X		
Pasadena.....	30,291	X					
Pomona.....	10,207	X	X		X		
Redlands.....	10,449	X	X		X	X	
Riverside.....	15,212	X	X	X			
Sacramento.....	44,696				X	X	
San Bernardino.....	12,779	X	X		X		
San Francisco.....	416,912	X	X		X		X
San Jose.....	28,946	X	X	X			
Santa Barbara.....	11,659	X	X				
Stockton.....	23,253	X			X		
Colorado:							
Colorado Springs.....	29,078	X	X	X			
Denver.....	213,381	X	X		X		
Pueblo.....	44,395	X	X	1 X	X	X	
Trinidad.....	10,204	X	X		X		

¹ Modification of Department of Agriculture card.² Milk depots, but not grocery and other stores.³ Notify dairy when over 500,000.⁴ Partial only.

TABLE 3.—Milk inspection in certain cities and towns having a population in 1910 of 10,000 and over, 1915—Continued.

State and city.	Popula- tion, 1910.	Country milk inspec- tion.	Dairy farms.		Stores selling milk scored.	Bacterio- logical standards enforced.	Pasteur- ization ordi- nance.
			Scored.	Scored by card employed by De- partment of Agri- culture.			
Connecticut:							
Bridgeport.....	102,054	x	x	x	x		
Greenwich.....	16,463	x	x	x	x		x
Hartford.....	98,015	x	x	x			
Meriden.....	32,066	x				x	
New Haven.....	133,705	x	x				
New London.....	19,659	x	x	1 x		x	
Norwalk.....	24,211					x	
Orange.....	11,772					x	
Stamford town.....	28,336	x	x			x	x
Waterbury.....	73,141	x				x	
Delaware:							
Wilmington *.....	87,411						
District of Columbia:							
Washington.....	331,069	x	x		x		
Florida:							
Jacksonville.....	57,699	x	x	x		x	
Tampa.....	37,782	x	x	1 x		x	
Georgia:							
Augusta.....	41,040	x	x			x	
Brunswick.....	10,182	x	x		x	3 x	
Rome.....	12,099	x				x	
Waycross.....	14,485		x	x		x	
Illinois:							
Alton.....	17,528	x				x	
Belleville.....	21,122					x	
Calro.....	14,548	x			x	x	
Chicago.....	2,185,283	x	x	x	x	x	x
Danville.....	27,871	x					
Elgin *.....	25,976						
La Salle, Peru, and Oglesby.....	(1)	x	x		x	x	
Moline.....	24,199	x	x			x	
Rockford.....	45,401		x			x	
Springfield.....	51,678		5 x			x	
Waukegan.....	16,099	x	x		x	x	
Indiana:							
Anderson.....	22,476	x	x				x
East Chicago.....	19,098	x	x	x	x	x	
Fort Wayne.....	63,933	x	x	x	x	x	
Gary.....	16,802	x	x			x	
Indianapolis.....	233,650	x	x		x	x	
Kokomo.....	17,010	x					
Logansport.....	19,050		x				
Marion.....	19,359	x	x	x			
Muncie.....	24,005	x					
Richmond.....	22,324		x				
Terre Haute.....	58,157	x	x	x	x	x	
Iowa:							
Cedar Rapids.....	32,811	x	x	x			
Clinton.....	26,577	x	x	x			x
Davenport.....	43,028		x				
Des Moines.....	86,368		x	x	x	x	
Mason City.....	11,230		x	x			
Sioux City.....	47,828	x	x	x	x		
Waterloo.....	26,663	x	x	x	x		
Kansas:							
Coffeyville.....	12,687	x					
Fort Scott *.....	10,463						
Hutchinson *.....	16,364						
Kansas City.....	82,331	x	x	x	x		
Topeka.....	43,684	x	x	x	x	x	

1 Modified.

2 Limited. Details not supplied.

3 Not rigidly.

4 Population of La Salle, 11,537; of Peru, 7,984; population of Oglesby not given by Census Bureau.

5 State board of health.

TABLE 3.—*Milk inspection in certain cities and towns having a population in 1910 of 10,000 and over, 1915—Continued.*

State and city.	Popula- tion, 1910.	Country milk inspec- tion.	Dairy farms.		Stores selling milk scored.	Bacterio- logical standards enforced.	Pasteur- ization ordina- nce.
			Scored.	Scored by card employed by De- partment of Agri- culture.			
Kentucky:							
Henderson.....	11,452	X	X		X	X	
Lexington.....	35,066	X	X	X		X	
Louisville.....	223,928	X	X	X	X		
Newport.....	30,309	X	X	X			
Paducah.....	22,760	X	X	X			
Louisiana:							
Lake Charles.....	11,449	X	X	X			
New Orleans.....	339,075		X		X		
Shreveport.....	28,015	X	X	X	X	X	
Maine:							
Portland.....	58,571					X	
Maryland:							
Baltimore.....	558,485	X	X	X	X	X	
Cumberland.....	21,839		X			X	X
Hagerstown.....	16,507	X				X	
Massachusetts:							
Arlington.....	11,187	X	X	X	X		
Attleboro.....	16,215	X	X	X		X	
Boston.....	670,585	X	X	X	X		
Brookton.....	56,878	X	X	X	X		
Brookline.....	27,792	X	X			X	
Cambridge.....	104,836					X	
Chelsea.....	32,452	X	X	X		X	
Clinton.....	13,075	X	X			X	
Everett ¹	33,494						
Fall River.....	119,295	X	X	X	X	X	
Fitchburg.....	37,826	X	X	X		X	
Frammingham.....	12,948	X	X	X		X	
Gardner.....	14,699	X	X	X		X	
Gloucester.....	24,398	X	X	X		X	
Greenfield.....	10,427		X	X			
Haverhill.....	44,115	X	X	X		X	
Holyoke.....	57,730		X	X			
Lowell.....	106,294					X	
Lynn.....	89,336	X					
Malden.....	44,404	X				X	
Melrose.....	15,715					X	
New Bedford.....	96,652		X	X		X	
Newburyport.....	14,949						
Newton.....	39,806		X	X			
North Adams.....	22,019	X	X	X			
Northampton ¹	19,431						
Pittsfield.....	32,121	X					
Salem.....	43,697	X	X	X		X	X
Somerville.....	77,236	X	X	X			
Southbridge.....	12,592	X	X	X		X	
Springfield.....	88,926	X	X	X			
Taunton.....	34,259	X	X				
Wakefield.....	11,404	X	X	X			
Waltham.....	27,834	X	X	X		X	
Westfield.....	16,044	X	X	X			
Winthrop.....	10,132						
Worcester.....	145,986	X	X	X		X	X
Michigan:							
Alpena.....	12,706	X					
Ann Arbor.....	14,817	X					
Battle Creek.....	25,267					X	
Bay City.....	45,166	X					
Detroit.....	465,766	X	X	X		X	X
Flint.....	38,550	X	X				
Grand Rapids.....	112,571	X	X	X	X	X	
Ironwood.....	12,821	X					
Jackson.....	31,433					X	
Kalamazoo.....	39,437	X	X	X	X	X	
Lansing.....	81,229	X	X			X	
Manistee.....	12,381	X					

¹ Irregularly.² With additions.³ Limited. Details not supplied.⁴ Modified.

TABLE 3.—Milk inspection in certain cities and towns having a population in 1910 of 10,000 and over, 1915—Continued.

State and city.	Popula- tion, 1910.	Country milk inspec- tion.	Dairy farms.		Stores selling milk scored.	Bacterio- logical standards enforced.	Pasteur- ization ordi- nance.
			Scored.	Scored by card employed by De- partment of Agri- culture.			
Michigan—Continued.							
Marquette.....	11,503	x	x	x	x	x	
Menominee.....	10,507	x	x	x			
Pontiac.....	14,532		x				
Saginaw.....	50,510	x	x		x	x	
Sault Ste. Marie ¹	12,615						
Minnesota:							
Duluth.....	78,466	x	x	x		x	
St. Paul.....	214,744	x	x	x		x	
Mississippi:							
Jackson.....	21,262	x	x	x		x	
Missouri:							
Hannibal.....	18,341	x	x	x	x	x	x
Joplin.....	32,073	x					
Kansas City.....	248,381	x	x	x	x	x	
St. Joseph.....	77,403	x	x				x
St. Louis.....	687,029	x	x	x	x	x	x
Montana:							
Billings.....	10,031		x		x		
Butte.....	39,165	x	x		x		
Missoula.....	12,869	x	x	x	x		
Nebraska:							
Lincoln.....	43,973	x	x		x	x	x
Omaha.....	124,096		x	x			x
Nevada:							
Reno.....	10,867		x	x		x	
New Hampshire:							
Berlin.....	11,780	x	x	x		x	
Concord.....	21,497	x	x			x	
Manchester.....	70,063	x	x		x	x	
Nashua.....	26,005	x	x		x		
New Jersey:							
Asbury Park.....	10,150	x	x	x			
Bloomfield.....	15,070	x	x				
East Orange ⁴	34,371						
Hackensack.....	14,050		x				
Jersey City.....	267,779	x	x	x	x		
Kearny.....	18,659		x			x	x
Long Branch.....	13,298	x	x	x		x	x
Montclair.....	21,550	x	x		x	x	x
Morristown.....	12,507	x					
Newark.....	347,469	x	x	x	(x)	x	x
Orange ⁵	29,630	x	x	x	x	x	x
Passaic.....	54,773	x	x				
Plainfield.....	20,550	x	x	x			x
Trenton.....	96,815	x	x			x	
West Hoboken ⁶	35,403						
West Orange ⁴	10,980						
West New York.....	13,560				x		x
New Mexico:							
Albuquerque.....	11,020		x			x	
New York:							
Albany.....	100,253	x	x	x		x	x
Amsterdam.....	31,267	x	x	x	x	x	
Buffalo.....	423,715	x	x		x	x	
Cohoes.....	24,709	x	x			x	
Cornwall.....	13,730	x	x		x	x	x
Cortland.....	11,504	x	x				
Dunkirk.....	17,221	x	x	x		x	
Glens Falls.....	15,243	x	x		x	x	
Hudson.....	11,417		x	x			
Ithaca.....	14,802	x	x			x	
Kingston.....	25,908	x	x		x		
Little Falls.....	12,273	x	x		x		

¹ Limited. Details not supplied.² Where 10 or more gallons are sold.³ Limited.⁴ See Orange.⁵ Inspect and grant permits.⁶ Milk inspection for the Oranges all under one system.⁷ Make regular bimonthly inspections.

TABLE 3.—*Milk inspection in certain cities and towns having a population in 1910 of 10,000 and over, 1915—Continued.*

State and city.	Popula- tion, 1910.	Country milk inspec- tion.	Dairy farms.		Stores selling milk scored.	Bacterio- logical standards enforced.	Pasteur- ization ordi- nance.
			Scored.	Scored by card employed by De- partment of Agri- culture.			
New York—Continued.							
Mount Vernon.....	30,919			x			
New Rochelle.....	28,867			x		x	
New York.....	4,766,883	x			x	x	x
Newburgh.....	27,805	x		x		x	
North Tonawanda.....	11,955	x		x		x	
Olean.....	14,743	x		x		x	
Ossining.....	11,480	x		x		x	
Oswego.....	23,368	x		x			
Plattsburg.....	11,138	x			x		
Poughkeepsie.....	27,936	x		x		x	
Rensselaer.....	10,711			x			
Rochester.....	218,149	x		x		x	x
Saratoga Springs.....	12,693	x		x		x	
Schenectady.....	72,826	x		x		x	x
Syracuse.....	137,249	x		x		x	x
Troy.....	76,813	x		x		x	
Watertown.....	26,730	x		x		x	
White Plains.....	15,949	x		x		x	
Yonkers.....	79,803	x		x		x	
North Carolina:							
Charlotte.....	34,014	x	x	x	x	x	x
Durham.....	18,241	x	x				
Greensboro.....	15,895	x	x				
Wilmington.....	25,748	x	x	x	x	x	
North Dakota:							
Fargo.....	14,331	x	x	x		x	
Ohio:							
Akron.....	69,067	x	x			x	
Canton.....	50,217	x	x	x			
Cincinnati.....	363,591	x	x		x	x	x
Cleveland.....	560,663	x	x	x	x	x	
Columbus.....	181,511	x	x		x	x	
Dayton.....	116,577	x	x	x	x	x	
East Liverpool.....	20,387	x	x				
Elyria.....	14,825	x	x	x		x	
Hamilton.....	35,279				x	x	
Ironton.....	13,147	x					
Lakewood.....	15,181	x					
Lorain.....	28,883	x	x	x	x	x	
Mansfield.....	20,768	x			x	x	
Middletown.....	13,152	x	x	x			
Newark.....	25,404	x					
Piqua.....	13,388		x	x			
Portsmouth.....	23,481	x	x				
Sandusky.....	19,989	x	x	x			
Springfield.....	46,921	x	x				
Toledo.....	168,497	x	x	x		x	
Warren.....	11,081	x	x				
Zanesville.....	28,026	x				x	
Oklahoma:							
McAlester.....	12,954	x					
Oklahoma City.....	64,205	x	x	x	x	x	
Tulsa.....	18,182	x	x				
Oregon:							
Portland.....	207,214	x	x	x		x	x
Pennsylvania:							
Altoona.....	52,127	x	x	x			x
Connellsville.....	12,245	x				x	
Erie.....	66,525	x	x	x	x	x	
Harrisburg.....	64,186	x				x	
Lancaster.....	47,227	x				x	
Lebanon.....	19,240	x				x	
Meadville.....	12,780	x	x	x	x	x	
Nanticoke.....	18,877	x	x			x	
New Castle ¹	36,280						
Philadelphia.....	1,549,008		x		x	x	x
Pittsburgh.....	533,905	x					

¹ Revised.² Modified.³ Work limited; by volunteer inspectors.

TABLE 3.—Milk inspection in certain cities and towns having a population in 1910 of 10,000 and over, 1915—Continued.

State and city.	Popu-lation, 1910.	Country milk inspection.	Dairy farms.		Stores selling milk scored.	Bacterio-logical standards enforced.	Pasteur-ization ordi-nance.
			Scored.	Scored by card employed by Department of Agri-culture.			
Pennsylvania—Continued.							
Reading.....	96,071	x	x				
Scranton.....	129,887	x	x			x	
Warren.....	11,080	x					
Rhode Island:							
Central Falls.....	22,754	x	x	x	x	x	
East Providence.....	15,808	x	x	x	x		
Newport.....	27,149	x				x	
Pawtucket.....	51,622	x					
Providence.....	224,326	1 x	1 x	x			
Woonsocket ¹	38,125						
South Carolina:							
Greenville.....	15,741		x	x	x	x	
Tennessee:							
Chattanooga.....	44,604	1 x	x	x		x	
Jackson.....	15,779		x	x			
Knoxville.....	36,346	x	x	x		x	
Memphis.....	131,105	x	x		x	x	
Nashville.....	110,364	x	x	x	x	x	
Texas:							
Austin.....	29,880	x	x	x			
Beaumont.....	20,640	x	x	x			
El Paso.....	39,279	x				x	
Marshall.....	11,452	x	x				
San Antonio.....	96,614		x	x		x	x
Texarkana ²	15,445	x	x	x	x	x	
Utah:							
Ogden.....	25,580		x	x		x	
Salt Lake City.....	92,777	x	x	x	x	x	x
Vermont:							
Barre.....	10,734	x	x	x		x	
Rutland.....	13,546	x	x				
Virginia:							
Danville.....	19,020	x	x	x			
Lynchburg.....	29,494	x	x			x	
Newport News.....	20,206	x	x				
Norfolk.....	67,452	x	x	x		x	x
Roanoke.....	34,874	x	x			x	
Washington:							
Everett.....	24,814	x	x	x			x
North Yakima.....	14,082	x	x	x		x	x
Seattle.....	237,194	x	x	x			
Spokane.....	104,402	x	x	x		x	
Tacoma.....	83,743	x	x	x	x	x	
West Virginia:							
Wheeling.....	41,641	x	x	x	x	x	
Wisconsin:							
Appleton.....	16,773					x	
Ashland ³	11,594						
Beloit.....	15,125		x	x			
Madison.....	25,531	x	x	x		x	x
Manitowoc ³	13,027						
Milwaukee.....	373,857	x	x	x		x	
Oshkosh.....	33,062					x	
Racine.....	38,002	x	x	x			x
Sheboygan.....	26,398	x					
Wausau.....	16,560	x					x

¹ Limited.

² Figures shown are for Texarkana, Ark., and Texarkana, Tex.

³ Limited. Details not supplied.

TABLE 4.—Summary of State laws and rulings relating to the prevention of blindness from babies' sore eyes (no county or city acts, ordinances, or rulings included).

[Based on statement published by National Committee for the Prevention of Blindness, revised to include the laws of 1915. References are to session laws unless otherwise specified.]

State.	Babies' sore eyes reportable.	Health officer empowered and required to secure attention for uncared-for cases.	Law in regard to reporting sore eyes printed on birth certificates.	Free prophylactic distributed.	Physicians and midwives required to use prophylactic.	Question on birth certificate whether or not prophylactic used.	How early and by whom births are reported.	Literature distributed by department of health.
Alabama.....							By physician or midwife, within the first days (sic) of each month. Code 1907, s. 711, as amended 1911, p. 117.	
Arizona.....							5 days, by physician, midwife, parent, or other person. Rev. Stat. 1913, s. 4417.	
Arkansas.....	By midwife, nurse, or other person having charge.						10 days, by physician, midwife, parent, or other person. Rules of State board of health, 1913.	
California.....	By physician or other practitioner, midwife, nurse, parent, or other person having charge.			Yes, 1915, c. 724.		Yes.....	36 hours, by physician or midwife, 10 days, by parent or other person. 1915, c. 378.	Copies of law to physicians, midwives, etc. 1915, c. 724.
Colorado.....	If no physician is in attendance, by parent, nurse, or other person in charge.	Yes. Penalty not to exceed \$300. Reg. No. 28, State board of health. (Adopted Feb. 7, 1916.)					10 days, by physician, midwife, parent, or other person. Mill's Anno. Stat. 1912, s. 448.	
Connecticut.....	By midwife, nurse, or attendant.						First week each month, by physician, midwife, etc. Gen. Stat. 1902, s. 1861, as amended 1907 c. 91.	Leaflet. Directions to mothers, midwives, and nurses.
Delaware.....							Notification within 24 hours, by physician or person present; certificate within 10 days, by physician, midwife, parent, or other person. Rev. Code 1915, s. 807.	

District of Columbia.	By midwife or attendant other than physician.	Health officer to secure medical attention. Penalty \$10 to \$50. Burns's Anno. Stat. 1914, s. 7607e.	Yes.	To midwives only. Report of the health officer, 1915, p. 72.	Yes. Rule No. 33, State board of health, May 13, 1914. Shall advise. Penalty \$10 to \$100, 1915, p. 366.	Yes. Burns's Anno. Stat. 1914, s. 7607c. Penalty \$10 to \$50.	Not later than Saturday next ensuing after a secular day, by physician, midwife, etc. 34 U. S. Stat., p. 1010.	Physician. How to keep your baby well containing warning about sore eyes.
Florida							10 days, by physician, midwife, parent, or other person. 1915, c. 6392, s. 13.	Leaflet. Directions to mothers, midwives, and nurses.
Georgia							10 days, by physician, midwife, parent, or other person. Anno. Code 1914, s. 1676(a).	Part of leaflet of instructions to midwives.
Idaho	By midwife, nurse, or other person, having charge.						10 days, by physician, midwife, parent, or other person. 1911, p. 638, s. 13.	
Illinois	By physician, midwife, nurse, parent, etc.						Notification within 24 hours and certificate in 10 days, by physician, midwife, parent, or other person. 1915, p. 660.	Advice and information, together with copies of the law, to physicians, midwives, and others. 1915, p. 366.
Indiana	By parent or attendant.		Yes.			Yes. Burns's Anno. Stat. 1914, s. 7607b. Penalty \$10 to \$50.	36 hours, by physician, midwife, etc. Burns's Anno. Stat. 1914, s. 7607b.	
Iowa	By physician.		Yes.				10 days, by physician, midwife, parent, or other person. 1911, c. 296.	Yes. Do.
Kansas							10 days, by physician, midwife, parent, or other person. Carroll's Stat. 1915, s. 2682a, 13-14.	Yes. Carroll's Stat. 1915, s. 2682b.
Kentucky	By physician, midwife, nurse, or parent.		Yes.	Yes. Annual appropriation, \$500. 1914, No. 174, p. 292.			Quarterly, by physician or midwife (in the State); 24 hours, by physician, midwife, parent, or other person present (in parish of Orleans). Wolff's Constitution and Rev. Laws, 2d ed., 1904, p. 1455, s. 9, and p. 1778 (1900, No. 162, s. 3), as amended 1910, p. 250.	Copies of law to all physicians, midwives, etc. 1914, No. 174, p. 292.
Louisiana	By physician, midwife, nurse, parent, or other attendant.							

1 See p. 112 for details.

TABLE 4.—Summary of State laws and rulings relating to the prevention of blindness from babies' sore eyes (no county or city acts, ordinances, or rulings included).

[Based on statement published by National Committee for the Prevention of Blindness, revised to include the laws of 1915. References are to session laws unless otherwise specified.]

State.	Babies' sore eyes reportable.	Health officer empowered and required to secure attention for uncared-for cases.	Law in regard to reporting sore eyes printed on birth certificates.	Free prophylactic outfit distributed.	Physicians and midwives required to use a prophylactic.	Question on birth certificate whether or not prophylactic used.	How early and by whom births are reported.	Literature distributed by department of health.
Alabama.....	.....	.....	.....	.....	.....	.....	By physician or midwife, within the first days [sic] of each month. Code 1907, s. 711, as amended 1911, p. 117.	.....
Arizona.....	.....	.....	.....	.....	.....	.....	5 days, by physician, midwife, parent, or other person. Rev. Stat. 1913, s. 4417.	.....
Arkansas.....	By midwife, nurse, or other person having charge.	.....	.....	.....	.....	.....	10 days, by physician, midwife, parent, or other person. Rules of State board of health, 1913.	.....
California.....	By physician or other practitioner, nurse, parent, or other person having charge.	.....	.....	Yes, 1915, c. 724.	.....	Yes.....	36 hours, by physician or midwife; 10 days, by parent or other person. 1915, c. 378.	Copies of law to physicians, midwives, etc. 1915, c. 724.
Colorado.....	If no physician is in attendance, by parent, nurse, or other person in charge.	Yes. Penalty not to exceed \$300. Reg. No. 28, State board of health. (Adopted Feb. 7, 1916.)	.....	.....	.....	.....	10 days, by physician, midwife, parent, or other person. Mill's Anno. Stat. 1912, s. 448.	.....
Connecticut.....	By midwife, nurse, or attendant.	.....	.....	.....	.....	.....	First week each month, by physician, midwife, etc. Gen. Stat. 1902, s. 1801, as amended 1907, c. 91.	Leaflet. Directions to mothers, midwives, and nurses.
Delaware.....	.....	.....	.....	.....	.....	.....	Notification within 24 hours, by physician or person present; certificate within 10 days, by physician, midwife, parent, or other person. Rev. Code 1915, s. 807.	.....

District or Column	By midwife or attendant or other than physician.	Health officer to secure medical attention. Penalty \$10 to \$50. Burns' Anno. Stat. 1914, s. 7607a.	To midwives only. Penalty of the health officer, 1915, p. 72.	To physicians. Letter from State board of health, Aug. 7, 1916. Yes. 1915, p. 366.	Yes. Rule No. 83, State Board of health, May 18, 1914. Shall advise. Penalty \$10 to \$100. 1915, p. 366.	Yes. Burns' Anno. Stat. 1914, s. 7607c. Penalty \$10 to \$50.	Yes. Burns' Anno. Stat. 1914, s. 7607b.	Not later than Saturday first occurring after 31 days, by physician, midwife, etc. 24 U. S. Stat., p. 1010.	Pamphlet. How to keep your baby well, containing warning about sore eyes.
Florida								10 days, by physician, midwife, parent, or other person. 1915, c. 6822, s. 13.	Leaflet. Directions to mothers, midwives, and nurses. Part of leaflet of instructions to midwives.
Georgia								10 days, by physician, midwife, parent, or other person. Anno. Code 1914, s. 1676(aa).	
Idaho	By midwife, nurse, or other person, having charge.							10 days, by physician, midwife, parent, or other person. 1911, p. 636, s. 13.	
Illinois	By physician, midwife, nurse, parent, etc.							Notification within 24 hours and certificate in 10 days, by physician, midwife, parent, or other person. 1915, p. 660.	Advice and information, together with copies of the law, to physicians, midwives, and others. 1915, p. 366.
Indiana	By parent or attendant.	Yes.						36 hours, by physician, midwife, etc. Burns' Anno. Stat. 1914, s. 7607b.	
Iowa	By physician.		Yes.					10 days, by physician, midwife, parent, or other person. 1911, c. 296.	Yes. Do.
Kansas								10 days, by physician, midwife, parent, or other person. Carroll's Stat. 1915, s. 2662a, 13-14.	Yes. Carroll's Stat. 1915, s. 2662b.
Kentucky	By physician, midwife, nurse, or parent.		Yes. Carroll's Stat. 1915, s. 2662b.					Quarterly, by physician or midwife (in the State); 24 hours, by physician, midwife, parent, or other person present (in parish of Orleans). Civil Code of Louisiana, s. 3, and p. 1778 (1906, No. 162, s. 3), as amended 1910, p. 220.	Copies of law to all physicians, midwives, etc. 1914, No. 174, p. 232.
Louisiana	By physician, midwife, nurse, parent, or other attendant.		Yes. Annual appropriation, \$500. 1914, No. 174, p. 232.		Yes. Penalty \$50 to \$200 or revocation of license. 1914, No. 174, p. 232.				

1 See p. 112 for details.

[illegible]

¹ See p. 112 for details.

DETAILS OF THE STATE REQUIREMENTS FOR REPORTING BABIES' SORE EYES.

[References are to session laws unless otherwise specified.]

Arkansas.—Inflamed, swollen, reddened, discharging eyes of infant at any time to be reported, within 6 hours, by midwife, nurse, or other person having charge, to health officer or physician. *Ruling State Board of Health, 1913.*

California.—Inflamed, reddened, swollen, discharging eyes of infant under 2 weeks to be reported by physician or other practitioner, midwife, nurse, parent, or other person having charge, within 24 hours, to health officer. Penalty, not more than \$50; for second offense, not more than \$100; for third offense and thereafter, not more than \$200; third conviction sufficient cause for revocation of midwife's or physician's license, etc. 1915, c. 724, p. 1431.

Colorado.—Inflamed, reddened, discharging eyes of infant under 2 weeks, should no physician be in attendance, to be reported by parent, nurse, or other person in charge, to local health officer or legally qualified physician. Penalty, not to exceed \$300. *Regulation No. 28, State Board of Health, adopted Feb. 7, 1916.*

Connecticut.—Inflamed, swollen, reddened eyes of infant under 2 weeks to be reported by midwife, nurse, or attendant, within six hours, to health officer. Penalty, not more than \$200. *Gen. Stat. 1902, s. 2535.*

District of Columbia.—Inflamed, discharging eyes of newborn child to be reported by midwife or attendant other than physician, within six hours, to health officer. Midwife or attendant must not treat disease. Penalty, not more than \$40. *Regulations of commissioners of August 25, 1911, effective September 27, 1911.*

Idaho.—Inflamed, swollen, reddened, discharging eyes of infant under 2 weeks to be reported by midwife, nurse, or other person having charge, within six hours, to health officer or physician. Penalty, not more than \$100 or 90 days, or both. *Re. Codes, 1908, s. 1108.*

Illinois.—Inflamed, swollen, reddened, discharging eyes of infant under 2 weeks to be reported by physician, midwife, nurse, parent, etc., within six hours, to health officer. Penalty, \$10 to \$100. 1915, p. 366.

Indiana.—Inflamed, swollen, reddened, discharging eyes of infant under 2 weeks to be reported by parents or attendant, within six hours, to health officer. Penalty, \$10 to \$50. *Burns's Anno. Stat. 1914, s. 7607d.*

Kansas.—Ophthalmia neonatorum to be reported by physicians. *Resolution State Board of Health.*

Kentucky.—Inflamed, swollen, reddened, or discharging eyes of infant under 30 days to be reported by physician, midwife, nurse, parent, within six hours, to health officer. Physicians, midwives, nurses to be instructed annually in regard to recognizing and treating the disease. Penalty, not more than \$100, or, for persistent failure, revocation of license. *Carroll's Stat. 1915, vol. 1, s. 2062b.*

Louisiana.—Red, swollen, inflamed, discharging eyes of infant under 2 weeks to be reported by physician, midwife, nurse, parent, or other attendant, within six hours, to health officer. Penalty for first offense, not more than \$50; for second offense, not more than \$100; and for third offense and thereafter, not more than \$200 or revocation of physician's or midwife's license. 1914, No. 174, p. 292.

Maine.—Reddened, inflamed eyes of infant under 4 weeks to be reported by midwife, nurse, or person having charge, at once, to physician. Penalty, not more than \$100 or six months. *Rev. Stat. 1903, c. 18, s. 90.*

Maryland.—Reddened, inflamed, swollen, discharging eyes of infant under 2 weeks to be reported by midwife, nurse, or other attendant than physician, immediately, to health officer or physician. Penalty, not more than \$5. *Anno. Code, vol. 3, 1914, art. 43, s. 79.*

Massachusetts.—Inflamed, swollen, red, discharging eyes of infant under 2 weeks to be reported by physician, nurse, relative, or other attendant, within six hours, to health officer. Penalty, physician, not less than \$50 nor more than \$200; other, not more than \$100. *Rev. Laws, 1902, c. 75, s. 49, as amended 1914, c. 177; s. 50, as amended 1907, c. 480.*

Michigan.—Redness, swelling, inflammation or discharge of eyes of infant under 2 weeks to be reported by midwife, nurse, or person having charge, within six hours, to physician. Penalty, not more than \$100 or six months, or both. 1913, No. 123, p. 221.

Minnesota.—Inflamed, reddened, diseased eyes of infant under 2 months to be reported by midwife, nurse, parent, or other person having charge, within 12 hours, to health officer. Infraction a misdemeanor. *Regulation State Board of Health.*

Mississippi.—Inflamed, reddened, swollen, discharging eyes of infant, within 2 weeks, to be reported by physician, midwife, nurse, relative, maternity home or hospital, parent, or other person in attendance, within six hours, to local health officer. Penalty, first offense \$50; second, \$100; and thereafter, \$200. 1916, c. 115.

Missouri.—Red, swollen, discharging eyes of infant under 3 weeks to be reported, at once, by midwife, nurse, or person having charge, to physician. Penalty, \$10 to \$100, or not more than six months, or both. *Rev. Stat. 1909, ss. 8321-8323.*

Nebraska.—Ophthalmia neonatorum classed as a contagious disease; physician required to report to State board of health within 24 hours; head of family or other person to report to local board of health. *Rules and Regulations, Nov. 9, 1915.*

New Hampshire.—Inflamed, swollen, reddened, discharging eyes of infant under 2 weeks to be reported by midwife, nurse, or person having charge, within six hours, to the board of health; physicians to report within 24 hours. Penalty, not more than \$25. 1915, c. 85.

New Jersey.—Inflamed, swollen, reddened, discharging eyes of infant under 2 weeks to be reported by midwife, nurse, or other attendant than physician, within six hours, to board of health. Penalty, \$50. *Comp. Stat. 1910, Health, p. 2753.*

New York.—Inflamed, reddened eyes of infant under 2 weeks to be reported by midwife, nurse, or other person having charge, immediately, to health officer or physician. Midwife, nurse, etc., must not use remedies. Infraction a misdemeanor. *Con. Laws 1909, c. 40, Penal Law, s. 482. Public Health Manual, State Dept. of Health, p. 129.*

North Carolina.—Inflamed, reddened eyes of infant under 2 weeks to be reported by midwife, nurse, or person acting as nurse, within six hours, to health officer or physician. Penalty, \$5 to \$10. 1915, c. 272.

North Dakota.—Inflamed, swollen, reddened, discharging eyes of infant under 2 weeks to be reported by parents or other attendant than physician, within six hours, to health officer. Penalty, \$10 to \$50. *Comp. Laws, 1913, s. 3170.*

Ohio.—Inflamed, swollen, reddened, discharging eyes of infant under 2 weeks to be reported by physician, midwife, nurse, parent, relative, or other attendant, etc., within six hours, to local health officer. Penalty, \$50 to \$100, and \$100 to \$300 for second or subsequent offense. *Gen. Code, 1910, ss. 1248-1 to 1248-7 as added by 1915, p. 321. (See also s. 12787.)*

Oregon.—Inflamed, swollen, or reddened eyes of infant under 2 weeks to be reported by midwife, nurse, or other person having charge, within 24 hours, to health officer or physician. Penalty, \$25 to \$100, or not more than 30 days, or both. 1915, c. 210.

Pennsylvania.—Inflamed eyes of infant to be reported by physician to health officer or State department of health. Inflamed, swollen, reddened eyes of infant under 2 weeks to be reported by midwife, nurse, or other person having care of infant, within six hours, to health officer or State department of health and physician. Penalty, \$20 to \$100, or 10 to 30 days, or both. 1913, No. 295.

Rhode Island.—Inflamed, swollen, discharging eyes of infant under 2 weeks to be reported by midwife, nurse, or other person having charge, within six hours, to health officer or physician. Penalty, not more than \$100, or six months, or both. *Gen. Laws 1909, c. 343, s. 25, as amended 1914, c. 1081.*

South Carolina.—Inflamed, reddened eyes of infant at any time after birth to be reported by midwife, nurse, or other person having charge, immediately, to health officer. Penalty, not more than \$25, or one month, or both. *Crim. Code 1912, s. 443.*

South Dakota.—Inflamed eyes of infant, within two months, to be reported by midwife, nurse, parent, or other person having charge, within 12 hours, to health officer. *Rule 61, Reg. Board of Health, July 25, 1913.*

Tennessee.—Inflamed, swollen, reddened, discharging eyes of infant under 2 weeks to be reported by nurse, midwife, or other person having charge, within six hours, to health officer or physician. Penalty, \$5 to \$100, or six months, or both. 1915, c. 52. (See also 1911, c. 10.)

Texas.—Inflamed, reddened eyes of newborn infant to be reported by midwife, nurse, or other attendant than physician, within 12 hours, to health officer or physician. Penalty, \$10 to \$1,000. *Rev. Civ. Stat. 1911, art. 4529, as amended 1911, c. 95.*

Utah.—Inflamed, discharging eyes of newborn infant to be reported by physician or midwife, within six hours, to health officer. Penalty, as for misdemeanor. 1911, p. 61.

Vermont.—Inflamed, swollen, red, discharging eyes of infant, within 2 weeks, to be reported by nurse, relative, or other person having charge, within six hours, to health officer. *Rule 29, State Board of Health.*

Washington.—Red, swollen, discharging eyes of infant under two weeks, to be reported by midwife, nurse, or other person in charge, immediately, to health officer or physician. *Regulation State Board of Health, July 15, 1912.*

West Virginia.—Inflamed, swollen, reddened, discharging eyes of infant, to be reported by midwife, nurse, or other person having charge, within six hours, to local health officer. Regulation 100, Public Health Council, adopted January 25, 1916; effective April 1, 1916. Penalty, \$10 to \$300 and 30 days. *1915, c. 11, s. 3.*

Wisconsin.—Reddened, swollen, discharging eyes of infant under 2 weeks to be reported by nurse, parents, or other person having charge, within six hours, to health officer. Penalty, not more than \$100. *Stat. 1915, c. 56, s. 1409a-2.1; 1409a-4.*

ADDITIONAL COPIES

OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.

AT

15 CENTS PER COPY

▽

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, CHIEF



ADMINISTRATION OF CHILD
LABOR LAWS

PART 2
EMPLOYMENT-CERTIFICATE SYSTEM
NEW YORK

By

HELEN L. SUMNER and ETHEL E. HANKS

OR

INDUSTRIAL SERIES No. 2, Part 2
Bureau Publication No. 17



WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

PUBLICATIONS OF THE CHILDREN'S BUREAU.

Annual Reports:

- Third Annual Report of the Chief, Children's Bureau, to the Secretary of Labor for the fiscal year ended June 30, 1915. 26 pp. 1915.
Fourth Annual Report of the Chief, Children's Bureau, to the Secretary of Labor for the fiscal year ended June 30, 1916. 27 pp. 1916.

Care of Children Series:

- No. 1. Prenatal Care, by Mrs. Max West. 41 pp. 4th ed. 1915. Bureau publication No. 4.
No. 2. Infant Care, by Mrs. Max West. 57 pp. 1914. Bureau publication No. 5.

Dependent, Defective, and Delinquent Classes Series:

- No. 1. Laws Relating to Mothers' Pensions in the United States, Denmark, and New Zealand. 102 pp. 1914. Bureau publication No. 7. (Out of print. Revised edition in preparation.)
No. 2. Mental Defectives in the District of Columbia: A brief description of local conditions and the need for remedial care and training. 34 pp. 1915. Bureau publication No. 13.

Infant Mortality Series:

- No. 1. Baby-Saving Campaigns: A preliminary report on what American cities are doing to prevent infant mortality. 93 pp. 4th ed. 1914. Bureau publication No. 3. (Bureau supply exhausted. Copies may be purchased from Superintendent of Documents at 15 cents each.)
No. 2. New Zealand Society for the Health of Women and Children: An example of methods of baby-saving work in small towns and rural districts. 15 pp. 1914. Bureau publication No. 6.
No. 3. Infant Mortality: Results of a field study in Johnstown, Pa., based on births in one calendar year, by Emma Duke. 93 pp. and 2 pps. illus. 1916. Bureau publication No. 9.
No. 4. Infant Mortality, Montclair, N. J.: A study of infant mortality in a suburban community. 36 pp. 1915. Bureau publication No. 11.
No. 5. A Tabular Statement of Infant-Welfare Work by Public and Private Agencies in the United States, by Etta R. Goodwin. 111 pp. 1916. Bureau publication No. 16.
No. 6. Infant Mortality: Results of a field study in Manchester, N. H., based on births in one year. Beatrice Sheets, Duncan and Emma Duke. Bureau publication No. 20. (In press.)

Industrial Series:

- No. 1. Child-Labor Legislation in the United States, by Helen L. Sumner and Ella A. Merritt. 1181 pp. 2 charts. 1915. Bureau publication No. 10.
Reprints from the above are also issued as follows:
Child-Labor Legislation in the United States. Separates No. 1. Analytical tables. 475 pp. 2 charts.
Child-Labor Legislation in the United States. Separates Nos. 2 to No. 10. Text of laws for each State separately.
Separate No. 14. Text of Federal Child-Labor Law, 1916.
No. 2. Administration of Child-Labor Laws:
Part 1. Employment Certificate System, Connecticut, by Helen L. Sumner and Ethel T. Hawks. 69 pp. 2 charts. 1915. Bureau publication No. 12.
Part 2. Employment Certificate System, New York, by Helen L. Sumner and Ethel T. Hawks. 164 pp. 3 charts. 1917. Bureau publication No. 17.
No. 3. List of References on Child Labor. 101 pp. 1916. Bureau publication No. 15.

(Continued on third page of cover.)

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

ADMINISTRATION OF CHILD
LABOR LAWS

PART 2
EMPLOYMENT-CERTIFICATE SYSTEM
NEW YORK

By

HELEN L. SUMNER and ETHEL E. HANKS



INDUSTRIAL SERIES No. 2, Part 2
Bureau Publication No. 17



WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

Harvard College Library
June 4, 1917
From the
United States Government.

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
20 CENTS PER COPY

CONTENTS.

Page	
5	Letter of transmittal.....
Follows page 5	Administrative agencies and their functions (chart)
7	Introduction.....
12-21	General administration.....
14	Local departments of health.....
17	Local school authorities.....
19	State industrial commission.....
20	State supervision.....
Faces page 22	Method of securing employment certificates, New York City (chart).....
21-33	Methods of securing employment certificates.....
22-31	Regular certificates.....
23	New York City, Manhattan Borough.....
28	New York City, other boroughs.....
28	Buffalo.....
29	Rochester.....
29	Other cities and villages.....
31	Number and form of certificates.....
32	Vacation and temporary certificates.....
32	Lost certificates.....
33	Over-age certificates.....
33-42	Evidence of age.....
34-37	Transcript of birth certificate.....
34	Native-born children.....
35	Foreign-born children.....
37	Certificate of graduation.....
38	Passport or baptismal certificate.....
38	Other documentary evidence of age.....
40	Physicians' certificate of age.....
41	Parent's affidavit.....
41	Disposition of documents.....
42-50	Physical requirements.....
44	Procedure.....
46	Tests.....
48	Causes for refusal of certificates.....
49	Treatment of refused cases.....
50	Physical examination in factories.....
50-63	Educational requirements.....
51	School records.....
52	Interpretation of grade requirements.....
52	Employment-certificate classes.....
55	Examinations for employment certificates.....
56	Children's records.....
57	Attendance requirements.....
58	Methods of issuing school records.....
60	Literacy test.....
60	Evening and continuation school attendance.....

	Page.
Enforcement	63-82
School attendance.....	66-70
New York City.....	66
Buffalo.....	68
Rochester.....	68
Second-class cities.....	69
Third-class cities.....	70
Villages.....	70
School census.....	70-74
Outside of first-class cities.....	70
Permanent census, New York City.....	71
Permanent census, Buffalo.....	71
Permanent census, Rochester.....	72
Immigrant children.....	74
Applicants for certificates.....	75-78
New York City.....	75
Buffalo.....	76
Rochester.....	77
Second-class cities.....	77
Third-class cities.....	78
Unemployed children.....	78
Industrial inspection.....	79
Conclusion	82-110
General administration.....	83
Methods of securing certificates.....	86
Evidence of age.....	90
Physical requirements.....	93
Educational requirements.....	96
Enforcement.....	101
Summary.....	108
Appendix	111-164
Application of laws.....	111
Analysis of application of laws (chart).....	Faces page 112
Laws relating to employment certificates.....	116
Amendments to employment-certificate law.....	132
Forms used in the administration of employment-certificate laws.....	134

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, D. C., October 9, 1916.

SIR: I transmit herewith a study of the administration of the New York State child-labor law with especial reference to the employment-certificate system. This is the second in the series of comparative studies of the administration of child-labor laws designed to bring out a standard method.

The law upon which the system here described is based differs in many important respects from that which furnishes the foundation for the methods described in the first report of the series, that on Connecticut.

Acknowledgment should be made of the cooperation of the Federal Commission on Industrial Relations in part of the preliminary field work for this report. The series of studies is under the direction of Miss Helen L. Sumner, the assistant chief of the bureau, who has been assisted in this report by Miss Ethel E. Hanks. Especial mention should also be made of the efficient editorial services of Mr. Howard C. Jenness.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

Hon. W. B. WILSON,
Secretary of Labor.



1862

int
re-
U.
re-
1

Of boys 14 to 16
with certifi-
cates who
have not fin-
ished eighth
grade

ADMINISTRATION OF THE EMPLOYMENT-CERTIFICATE SYSTEM IN NEW YORK.

INTRODUCTION.

The child-labor and employment-certificate laws of New York State differ in many important respects from those of Connecticut, described in the first report of this series. In both States 14 years is the minimum age and children from 14 to 16 must secure certificates before they can be employed legally; but in Connecticut the law is State wide in its application, whereas in New York various sections are in force in cities and villages of different sizes. In Connecticut the list of places of employment covered by the law includes "mechanical" establishments, and this term is held to bring under its provisions practically all child laborers except newsboys and children employed in agricultural pursuits and in domestic service.¹ In New York, on the other hand, different lists of places of employment to which the law applies are given for cities and villages of different sizes, but no list includes any general term which can be held to cover occupations not specifically mentioned.²

In New York State employment certificates issued by local health authorities must be obtained by children from 14 to 16 years of age as a condition of employment:

A. At any time,

1. In any place in the State in—

Factories.³

Mercantile establishments.

Business offices.

Telegraph offices.

Restaurants.

Hotels.

Apartment houses.

Distribution or transmission of merchandise or messages.⁴

¹ U. S. Children's Bureau. Employment Certificate System, Connecticut. Bureau publication No. 12, p. 8.

² The exact application of the minimum-age and employment and school-record certificate provisions of the New York laws is discussed in the Appendix, pp. 111 to 115.

³ Labor Law, sec. 70; Education Law, sec. 626. For the text of these sections see pp. 120, 126.

⁴ Education Law, sec. 626. Labor Law, sec. 163, requires certificates only in places of 3,000 inhabitants or more in mercantile establishments, etc. For the text of these sections see pp. 126, 124.

A. At any time—Continued.

2. In cities and villages having a population of 3,000 or more in—

Theaters.¹

Places of amusement.

Bowling alleys.

Barber shops.

Shoe-polishing establishments.

Distribution or transmission of articles other than merchandise or messages.

Distribution or sale of articles.²

3. In first and second class cities in—

Any other occupation.³

B. During school hours,

1. In places, other than first and second class cities, having a population of 5,000 or more in—

Any other occupation.⁴

The New York law also requires children from 14 to 16 years of age to obtain "school-record certificates" from local school authorities as a condition of employment at any time, in any place, and in any occupation where employment certificates are not required.⁵

To obtain a school-record certificate a child is not required to produce the same evidence of age or to meet the same physical requirements as to obtain an employment certificate. For an employment certificate the labor law specifies carefully the required evidence of age, whereas for a school-record certificate the education law does not state what kind of evidence is acceptable, but merely requires that the child shall be over 14 and that the record shall contain the date of his birth "as shown on the school record." A physical examination is required, as will be seen, for an employment certificate but not for a school-record certificate. The educational requirements are the same⁶ for both. In practice, as children are required frequently, if not generally, to secure employment certificates before having their names taken from the school registers, the school-record certificate is of little importance except as a prerequisite to an employment certificate. For this reason no special attention is given in this study to the school-record certificate as distinguished from the school record discussed under "Educational requirements."

¹ Children taking speaking parts in theatrical performances are not affected by this provision but are covered by Penal Law, ch. 40, art. 44, sec. 485 as amended by 1916, ch. 278.

² Labor Law, sec. 162. For the text of this section see p. 124.

³ Education Law, sec. 626. For the text of this section see p. 126.

⁴ Education Law, sec. 621. For the text of this section see p. 125. For definition of cities of different classes, and of villages and towns, see footnote 7, p. 112.

⁵ Education Law, secs. 624 and 626. For the text of these sections see pp. 125, 126.

⁶ Education Law, sec. 630, and Labor Law, secs. 73 and 165. For the text of these sections see pp. 127, 122, 124.

The requirements for obtaining certificates are notably higher in New York than in Connecticut. The evidence of age to be produced is carefully specified in the law instead of being left to the discretion of the administrative authorities as in Connecticut. The educational standard is completion of the sixth¹ instead of the fifth grade, as is practically the requirement in Connecticut. But most important of all, every child from 14 to 16 years of age who applies for a certificate in New York is required by law to undergo a physical examination, whereas in Connecticut only children who appear physically unfit are subjected to any physical test.

In New York, as in Connecticut, the mere possession of a certificate to work does not exempt a child from school attendance; he must be actually at work. To be exempt from school attendance in New York, indeed, a child 14 to 16 years of age not only must hold an employment or school-record certificate but must be "regularly and lawfully" engaged in some "useful employment or service."² This does not necessarily mean that the child must be engaged in remunerative work. Either an employment certificate or a school-record certificate acts as a permit to stay out of school to engage in "any useful employment or service," for example, to help in the housework or in the care of the baby at home. The parent is responsible for the school attendance not only of a child who has no certificate but also of a child who, though he has a certificate, is not "regularly engaged in any useful employment."

One fundamental difference, however, is to be noted between the employment-certificate system of Connecticut and that of New York. In Connecticut the certificate must be delivered by the issuing officer to the employer; the employer must notify the issuing office of both the commencement and the termination of the child's employment; and the child must secure a new certificate for each separate employer.³ In New York, on the other hand, on the application of the parent or guardian and after fulfillment of the requirements, the employment certificate is given to the individual child; it is regarded as his property and authorizes any employer to employ him subject to the other regulations of the law. In addition to the date and place of birth of the child and a statement to the effect that the required papers have been duly examined, approved, and filed, and that the child has appeared before the issuing officer and been examined, it must contain, for the purpose of identification, the child's signature and a description consisting of the color of his

¹ After Feb. 1, 1917, the standard for children under 15 will be completion of the eighth grade. Acts of 1916, ch. 465. For the text of this act see pp. 132-133.

² Education Law, secs. 621 and 624. For the text of these sections see pp. 125, 126.

³ The parent has a copy of the certificate which the child can use temporarily, but this copy is clearly marked "For parent; not good for employer longer than one week." U. S. Children's Bureau. Employment Certificate System, Connecticut. Bureau publication No. 12, p. 16.

hair and eyes, his height, weight, and any distinguishing facial marks.¹ While the child is employed the certificate must be kept on file by the employer in the place of employment and must be shown on demand to inspectors of the department of labor or to attendance officers,² but when the employment ceases the employer merely gives the certificate back to the child.³ He is not required to notify any public authority either that he has employed the child or that the child's employment has ended.

In addition to keeping employment certificates, every employer covered by the New York labor law—i. e., operating a factory anywhere in the State or conducting, in a city or village with a population of 3,000 or more, a mercantile or other establishment mentioned in the labor law—must keep a register containing the name, address, birthplace, and age of every child under 16 employed in his establishment. This register, like the certificate, is open to inspection by agents of the department of labor and by attendance officers.⁴

The other important provisions relating to child labor, in the enforcement of which employment certificates may be used as evidence of age of certain children to whom the law applies, establish in New York decidedly higher standards than in Connecticut. Whereas in Connecticut children under 16 are permitted to work 10 hours a day, in New York they are permitted to work only 8 hours a day for not more than 6 days a week, such hours to be between 8 a. m. and 5 p. m. in factories and between 8 a. m. and 6 p. m. in mercantile establishments.⁵

The list of dangerous occupations and industries in which children under 16 are forbidden to engage is also much longer and more complete in New York⁶ than in Connecticut.

So far as the administration of the employment-certificate law is concerned, however, the most important difference between Connecticut and New York is that in the former one State agency and in the latter two local agencies and two State agencies are concerned in its enforcement. The centralization of administrative power in Connecticut and its diffusion in New York have far-reaching consequences throughout the employment-certificate systems of the two States.

The Federal census statistics of child labor in New York State in 1910 show 35,757 boys and 24,485 girls; in all, 60,242 children 14 and 15 years of age engaged in gainful occupations. Of these, 10,641 children were engaged in agricultural pursuits and in domestic

¹ Labor Law, secs. 71, 72, 163, and 164. For the text of these sections see pp. 120, 122, 134.

² Labor Law, secs. 70, 76, 162, and 167; Education Law, sec. 633. For the text of these sections see pp. 120, 122, 124, 128.

³ Labor Law, secs. 76 and 167. For the text of these sections see pp. 122, 134.

⁴ Labor Law, secs. 76 and 167; Education Law, sec. 633. For the text of these sections see pp. 122, 124, 128.

⁵ Labor Law, secs. 77 (as amended by 1912, ch. 539, and by 1913, ch. 465) and 161 (as amended by 1914, ch. 331, and by 1915, ch. 386).

⁶ Labor Law, sec. 93 (as amended by 1910, ch. 107, and by 1913, ch. 464); Penal Law, sec. 485.

and personal service. Of the 5,623 classified as in the latter group, 4,395 were servants and the remaining 1,228 were in occupations covered by the law at that time as well as by the law of 1915, with the exception of those in barber shops and shoe-polishing establishments.

More than half of the working children of the State in 1910 were in the city of New York, where 37,235 boys and girls 14 and 15 years of age were engaged in gainful occupations. The three first-class cities, New York City, Buffalo, and Rochester, moreover, contained together 42,109 working children of this age group, more than two-thirds of all those in the State.

During the year ended September 30, 1914, 42,468 certificates were issued in New York State.

The table following gives certain data for New York City in regard to employment certificates for the year ended December 31, 1915.¹

Employment certificates, New York City, year ended December 31, 1915.

Borough.	Applications for certificates.						
	Received.	Granted.	Refused.				
			Total.	Insuffi- cient tuition. ¹	Educa- ²	Over age.	Under age.
The city.....	39,443	37,131	2,364	155	79	741	109
Manhattan.....	18,665	17,228	1,643	120	38	539	66
Bronx.....	4,119	3,880	230	11	9	40	11
Brooklyn.....	13,225	12,749	446	7	21	118	1
Queens.....	2,888	2,747	134	16	11	39	31
Richmond.....	546	527	11	1	.....	5	.....

Borough.	Applications for certificates—Continued.					Duplica- tes issued.	Certifi- cates expired.	Certifi- cates in force at end of year.
	Refused—Continued.							
	Physical incapacity.							
	Total.	Malnu- trition.	Cardiac.	Pul- monary.	Miscel- laneous.			
The city.....	1,290	454	429	9	398	1,555	37,262	57,434
Manhattan.....	780	365	219	4	192	834	17,719	26,288
Bronx.....	159	28	87	3	31	143	3,789	4,928
Brooklyn.....	299	83	106	1	159	495	12,448	23,464
Queens.....	37	16	16	1	4	69	2,848	3,167
Richmond.....	5	2	1	.....	2	9	448	587

Fewer certificates were issued in 1914 than in 1913 because of the fact that an amendment to the law effective September, 1913, added completion of the sixth grade to the former requirement—ability to

¹ Statistical report of division of employment certificates of the bureau of child hygiene, department of health, New York City, for the year ended Dec. 31, 1915.

² See p. 26.

pass an educational test.¹ In New York City 33,192 certificates were granted during the year 1914 and 1,390 were temporarily or permanently refused, whereas, in 1913, 41,507 were granted and 2,185 were refused. In Buffalo 2,900 certificates were granted during 1914 and 753 temporarily or permanently refused—a decrease from 3,993 granted and an increase from 642 refused during 1913. In Rochester 1,429 certificates were issued during 1914 and 883 were temporarily and 2 permanently refused, as against 1,947 granted and 1,469 refused during 1913.

Because of differences in both the application of the law and the organization of the issuing offices in cities of different classes, the administration of the employment-certificate law of New York State was studied in several cities of each class, as well as in cities with diverse industries employing large groups of children, so that the conditions discussed might be fairly representative of those throughout the State. The first-class cities—New York City, Rochester, and Buffalo—were all visited. Those of the second class visited were Albany, the capital of the State; Troy, a manufacturing city north of Albany, near the junction of the Hudson and Mohawk Rivers; and Utica and Syracuse, in the central part of the State. Those of the third class were Little Falls, in the central part of the State; Cohoes, near Troy; and Tonawanda, near Buffalo. In addition the village of Victory Mills, northeast of Albany, was visited.

The methods used in New York City were first studied and have been used, so far as possible, as the basis of comparison in discussing the methods in Buffalo and Rochester and in the second-class cities. In the third-class cities the procedure was found to be so varied that, when necessary, each has been described separately. In all these places except Little Falls, Tonawanda, and Victory Mills the descriptions are based on actual observation of procedure, as well as on statements of officials. The field studies upon which this report is based were completed in May, 1915, and except when otherwise indicated, the conditions existing at that time furnish the basis both for the description of facts and for the conclusions.

GENERAL ADMINISTRATION.

In New York State the administration of laws relating to the employment of children from 14 to 16 years of age is in the hands of four agencies—the local health departments or health officers, who issue employment certificates and who in small cities and towns are authorized to inspect mercantile establishments; the local boards of education or public-school authorities, who issue school records and enforce the compulsory school-attendance law; the State department

¹ Labor Law, secs. 73 and 165; Education Law, sec. 630, subsec. 1. For the text of these sections see pp. 122, 124, 127.

of education, which has general supervision over the enforcement of the compulsory-education law throughout the State and may withhold one-half of the State appropriation from any school district which fails to enforce school attendance;¹ and the State industrial commission, which, through inspectors of the department of labor, of which it is the head, enforces the provisions of the labor law, and supervises the issuance of employment certificates.

Three forms to be used in the administration of the employment-certificate system are specified in the labor law: The school-record blank,² the physical-examination blank,³ and the employment-certificate blank.⁴ The law provides that in cities of the first and second classes the school-record and employment-certificate blanks shall be approved by the industrial commission; that in other cities and in towns and villages these forms shall be prepared and furnished by the industrial commission; and that no school record or employment certificate other than those approved or furnished by the industrial commission shall be used.⁵ The industrial commission, however, has supervision only over the form and not over the accuracy of the statements contained in the school record.

Although the industrial commission approves the form, the preparation of the school-record blank has been left to the State department of education, which provides a model conforming to the law. Upon this model the forms furnished by local authorities are supposed to be based. In New York City the department of education provides school-record blanks to public schools and to parochial schools if desired; the department of health furnishes them to parochial schools and to children from other cities applying without them. In Buffalo the department of health, and in Utica and Cohoes the board of education, furnishes them to all schools, public and parochial. In all the other places visited the State department of education furnishes the forms. In Syracuse the blanks are available at the bureau of health, and in the other places at the office of the superintendent of schools.

The form used for the record of the physical examination must be furnished by the State industrial commission to the local departments of health⁶ and is, therefore, uniform throughout the State.

The form of an employment certificate must be approved by the industrial commission; the contents are specified in the law. In 1913, when the labor law was amended to provide that "no employment certificates other than those approved or furnished by the

¹ Education Law, sec. 636. For the text of this section see p. 128.

² Form 1, p. 134.

³ See p. 43.

⁴ Form 2a, p. 134.

⁵ Labor Law, secs. 75 and 166. For the text of these sections see pp. 122, 124.

⁶ Labor Law, secs. 71 and 163. For the text of these sections see pp. 120, 124.

commissioner of labor [industrial commission]"¹ should be used, instructions and a model form of certificate were sent to every issuing officer in the State. The department of labor furnishes blank employment certificates free to any issuing officer, and officers furnishing their own are supposed to base them on the model adopted by the department. All the first and second class cities in the State furnish their own forms. The third-class cities visited use the form furnished by the department of labor.

LOCAL DEPARTMENTS OF HEALTH.

Under the labor law the local departments of health have two important duties—the issuance of employment certificates and the enforcement of the law relating to the inspection of mercantile establishments in places, other than first and second class cities, having a population of 3,000 or more.

Although the responsibility for issuing employment certificates rests upon the "commissioner of health or the executive officer of the board or department of health," this "board, department, or commissioner" may designate some other officer of the board or department of health to issue certificates. Frequently, indeed, a clerk employed by the department of health is designated as the issuing officer. The physical examination, however, must always be made by "a medical officer of the department or board of health."² The exact apportionment of the work of issuing certificates depends in part upon the way in which the department of health is organized.

The organization of departments of health differs widely in cities of different classes and even in those of the same class. In New York City the department is under the direction of a board of health consisting of the commissioner of health (who is also president of the board and executive officer of the department of health), the police commissioner, and the health officer of the port. The first two are appointed by the mayor and the last by the governor of the State. The department comprises eight bureaus, one of which, the bureau of child hygiene, includes as one of its seven divisions the division of employment certificates. In Buffalo the department of health is under the direction of a board consisting of the mayor, the president of the board of public works, and the health commissioner. One of the ten bureaus of this department is the bureau of child hygiene, a division of which issues employment certificates. In Rochester a commissioner of public safety appoints the health officer, and these two officers in conjunction have all the powers and perform all the duties which in New York City and Buffalo are vested in the board

¹ Labor Law, secs. 75 and 166. For the text of these sections see pp. 122, 124.

² Labor Law, secs. 71 and 163. For the text of these sections see pp. 120, 124.

of health. The section of child labor of the bureau of health issues employment certificates. In second-class cities the organization of the health department is similar to that in Rochester. In a third-class city the board of health consists of the mayor and at least six other persons, one of whom is a physician; in a town it is the same as the town board, which consists of the town supervisor and the several justices of the peace; and in a village it consists of the board of trustees. Each of these local boards of health appoints a physician, not a member, to act as health officer.

In New York City an issuing office is maintained in each of the five boroughs—Manhattan, Brooklyn, Bronx, Queens, and Richmond. The work in each of these is in charge of a chief who reports to the chief of the division of employment certificates. The latter has general supervision over all issuing offices. The headquarters are in the Manhattan office. In this office there are regularly employed one chief clerk, one clerk who interviews children and parents when they first enter the office, one clerk who issues certificates, two physicians—a woman who is at the office half of each day and a man who is at the office the other half of each day—and a nurse to assist the physicians. At the Brooklyn office the regular force consists of two clerks, two medical examiners, and one nurse to assist the examiners. The examiners—a man and a woman—alternate, each being on duty half a day. Either one examines both boys and girls. The issuing office of Bronx Borough is in charge of a medical inspector who examines the children, but a nurse interviews them when they first enter and issues the certificates after the examination. At times a clerk interviews applicants and other persons coming to the office and also passes upon some of the documents presented. In Queens Borough the office force consists of a medical inspector in charge, who examines all applicants; a nurse who assists him, interviews the children, and issues certificates; and a clerk who assists in various ways. In Richmond Borough the borough chief makes the physical examination and a clerk interviews children, issues certificates, and has charge of the files.

In each of the other first-class cities only one issuing office is maintained. In the Buffalo office the regular force consists of the medical inspector in charge who examines the applicants; a woman attendant who interviews children and parents, assists the physician in his examinations, and issues certificates; and a clerk who assists in interviewing children and in issuing certificates. In Rochester a graduate nurse devotes her whole time to interviewing applicants, to making the larger part of the physical examinations, and to issuing certificates. The health officer makes the more difficult tests of the physical examination.

During the busy seasons additional school nurses and medical inspectors—and in New York City, clerks as well—assist in the issuing offices in all the first-class cities.

In the second-class cities visited the work of issuing certificates is nominally in direct charge of the health officer. In Albany a clerk, who is the commissioner of deeds, performs all the clerical work, administers oaths when necessary, and sometimes interviews children. Usually, however, applicants are interviewed by whatever medical inspector happens to be in the office. In Troy the health officer is the examining physician and the health bureau clerk administers oaths and issues certificates. In Utica the health officer supervises the issuance of certificates; but the deputy health officer usually makes the physical examination and the clerk of the bureau, who is also the commissioner of deeds, administers oaths when necessary and issues certificates. In Syracuse the deputy health officer instead of the health officer supervises the work and administers oaths to parents. Two school medical inspectors are detailed on alternate weeks to give physical examinations and a clerk issues certificates.

In none of the third-class cities visited, except Cohoes, does the health officer have any assistance in the issuing of certificates. At Cohoes the clerk of the board of health comes to the office when necessary to administer oaths to parents.

In Victory Mills the health officer examines applicants and the village clerk issues certificates.

Even in cities of the same class, it appears, the issuing officer is sometimes a physician and sometimes a clerk. In New York City the division of duties made necessary by the large number of applicants makes it possible for the medical examiner to pass only on the physical condition of the children. In Buffalo and Rochester, on the other hand, the physician who regularly makes the physical examination is the consulting authority on other points and is regarded as the issuing officer. In Little Falls and Tonawanda this physician is the health officer and performs all the work necessary in the procedure of issuance. In Albany, Troy, Utica, Syracuse, Cohoes, and Victory Mills the examining physician, whether the health officer, a deputy, or a designated physician, is not regarded as the issuing officer and assumes little responsibility beyond passing upon the physical condition of the child.

The method of selecting employees in the health departments visited differs widely. In New York City and Buffalo all appointments are made by the local board of health and, with the exception of the heads of bureaus, are under civil-service regulations. In none of the other places visited, except Cohoes, is the health officer under such regulations, but in Rochester and in the second-class cities all

clerks and inspectors are chosen from a competitive civil-service list. In Cohoes all employees of the board of health, including the health officer, are appointed from such a list; in Victory Mills no civil-service regulations are in effect under the board of health.

LOCAL SCHOOL AUTHORITIES.

The local school authorities perform two functions which have a direct relation to children desiring to go to work. First, they pass upon the educational equipment and the school attendance of such children and issue school records to children from 14 to 16 years of age who are eligible, so far as their education is concerned, for employment certificates. Second, they enforce school attendance of all children, including those of working age, and as one method of enforcement they take a regular school census.

According to the compulsory education law, the school records are issued by the following officers: In cities of the first class, by the principal or chief executive officer of the school which the child has attended; in other cities and in school districts having a population of 5,000 or more and employing a superintendent of schools, by the superintendent only; and in all other school districts by the principal teacher of the school.¹

School attendance is enforced by the local attendance officers² and through the taking of a regular census of children in every school district of the State.³ In first-class cities the census is constantly in progress; in other cities it is taken once every four years, and in rural districts annually. The facts to be ascertained by enumerators relate to residence, date of birth, names of parents or guardians, literacy, school attendance, and employment of all children between 4 and 18 years of age (5 and 18 in rural districts).

In the three first-class cities—New York, Buffalo, and Rochester—permanent census boards were established under a law of 1908, which prescribed that these boards should maintain through the police force a constant census amended from day to day. In Buffalo and in Rochester this board consists of the mayor, the superintendent of schools, and the police commissioner, and appoints a secretary and other employees.

In New York City, by an act of the legislature of 1914, the compulsory education division of the department of education and the permanent census board were consolidated into a "bureau of compulsory education, school census, and child welfare," which

¹ Education Law, sec. 630, subsec. 2. For the text of this section see p. 128.

² Education Law, sec. 632. For the text of this section see p. 128.

³ Education Law, secs. 650-653; Greater New York Charter, 1901, ch. 461, sec. 1009, subdivision 8, added by Acts of 1914, ch. 479. For the text of these sections see pp. 129, 130.

works under the general supervision of the city superintendent of schools, who himself acts under the direction of the board of education. This bureau, known as the bureau of attendance, has for its purpose the enumeration of children, the enforcement of school attendance, and the handling of problems which affect the school attendance, education, employment, and welfare of children from 4 to 18 years of age. It has one main office with 13 branch offices in different parts of the city. To carry on its work the bureau employs a director and an assistant director appointed by the board of education for terms of six years each, a chief attendance officer, 2 division superintendents, 13 district supervising officers, 2 women supervisors of the welfare of high-school girls, 1 newsboy attendance officer, 1 medical supervisor, 2 supervisors of census enumeration, 1 "man at large," 133 attendance officers (20 of them women) who are also census enumerators, and 73 clerks, 1 of whom is a stenographer—a total force of 231. Commercial high-school students also assist in the stenographic work of the office.

In Buffalo the department of compulsory education, in cooperation with the permanent census board of the city, enforces school attendance. The director of compulsory education is appointed by the superintendent of education and supervises the work of the 15 attendance officers. Under the direction of the secretary of the permanent census board 60 policemen are employed whenever a census of children is taken. In the office are regularly employed six clerks, and during and after a census extra clerks assist in tabulating results.

In Rochester the efficiency bureau of the department of public instruction and the permanent census board of the city enforce school attendance. In the office of the efficiency bureau are employed a director (who is one of the assistant superintendents of schools), two stenographers, and two clerks. Four attendance officers are employed in the field. Six police enumerators, one in each precinct of the city, are employed constantly under the direction of the secretary of the permanent census board, and in the office of this board are employed one chief clerk (who is a stenographer) and two assistant clerks.

In the rest of the State the school census is taken by employees, most of them temporary, of the local school authorities, and school attendance is enforced by regular attendance officers. Though the selection of these officers is a local matter, their appointment is not left to the discretion of the local officials. The law provides that one or more attendance officers shall be appointed by the school authorities "of each city, union free school district, or common school district whose limits include in whole or in part an incorporated village"; and that one or more attendance officers whose jurisdiction shall extend over school districts not otherwise provided

for shall be appointed, subject to the written approval of the school commissioner of the district, by the town board of each town. In the former class of places the superintendent of schools, and in the latter the school commissioner, supervises the work of the attendance officers.¹

Of the smaller places visited, Albany had three attendance officers, Troy and Syracuse had two each, and Utica, Tonawanda, Cohoes, Little Falls, and Victory Mills had one each.

With few exceptions the attendance officers, enumerators, and other employees of the boards of education in the places visited and of the census boards in the first-class cities are appointed under civil-service regulations. Those who are not thus appointed are the director and assistant director of the bureau of attendance of New York City, whose qualifications are stated in the law; the secretaries of the census boards in Buffalo and in Rochester; the clerks in the efficiency bureau in Rochester; and the attendance officers in Syracuse and Victory Mills.

STATE INDUSTRIAL COMMISSION.

The enforcement of child-labor laws in factories throughout the State and in mercantile establishments in first and second class cities is vested in the State industrial commission.² This commission, which became the head of the department of labor on June 1, 1915, consists of 5 commissioners appointed by the governor and is advised by an unpaid industrial council of 10 members, also appointed by the governor. Six bureaus are provided for in the labor law: Inspection, statistics and information, mediation and arbitration, industries and immigration, employment, and workmen's compensation.³ The only bureau, however, which has direct relation to the enforcement of child-labor laws is that of inspection. This bureau, subject to the supervision and direction of the industrial commission, has charge of all inspections made for enforcing the provisions of the labor laws. It consists of four divisions. The division of factory inspection enforces all laws relating to the employment of children in factories throughout the State. The division of mercantile inspection enforces all laws relating to the employment of children in mercantile establishments in first and second class cities. The division of home-work inspection aids in the enforcement of the law prohibiting home work of children under 14 years of age, and under 16 years of age without certificates. The division of industrial hygiene, through the section of medical inspection, has charge of both the physical

¹ Education Law, sec. 632. For the text of this section see p. 128.

² Labor Law, secs. 56 and 172. For the text of these sections see pp. 118, 124.

³ Labor Law, sec. 42 (as amended by 1915, ch. 874).

examination and the medical supervision of children employed in factories.¹

In order to assist in the general administration of the labor laws, provision is made that all factories must be registered with the industrial commission within 30 days after commencing business or after a change of location.¹

The main offices of the industrial commission are in New York City. The division of factory inspection has headquarters at New York City, with branch offices in Albany, Buffalo, Rochester, and Utica. The division of mercantile inspection has headquarters in New York City, with no branch offices.

The commission has 8 supervisory inspectors, 131 deputy factory inspectors, and 20 mercantile inspectors. All the employees in the department except the deputy commissioners and counsel are under civil-service regulations.

STATE SUPERVISION.

General supervision over the administration of child-labor laws is vested in the State industrial commission as to the provisions of the labor law and in the State commissioner of education as to the provisions of the education law. The industrial commission is directed by law to "inquire into the administration and enforcement" of the provisions of the labor law relating to the employment of children, and for this purpose the commission or persons authorized by it have access to all papers and records kept by local officers charged with the duty of issuing employment certificates.² The industrial commission may also investigate and report upon "all matters relating to the enforcement and effect" of the provisions of the labor law relating to child labor.³ At the time the provision relating to supervision went into effect, in October, 1913, the department of labor sent out general instructions with regard to the methods of issuing certificates, the character of records to be kept, and the method of making these records; and also suggestions as to the method of making physical examinations. Otherwise, practically no State supervision over the issuing of certificates had been exercised up to the time of this investigation.

Reports of the issuance of certificates are required by law. The health commissioner of a city, village, or town must transmit to the industrial commission, between the 1st and 10th of each month, a list of all children to whom certificates have been issued during the preceding month and a duplicate copy of the physical-examination

¹ Labor Law, secs. 53-61 and 69. For the text of these sections see pp. 117-119, 120.

² Labor Law, secs. 75 and 166. For the text of these sections see pp. 122, 124.

³ Labor Law, sec. 51. For the text of this section see p. 117.

record of every child who has received or been refused a certificate.¹ When reports are received at the department of labor the date of birth given in the lists is checked with that on the physical-examination sheet to see if they correspond. If errors are discovered in such dates, the records are sent back to the issuing offices to be corrected.

Supervision by the State department of education is exercised in practice solely with a view to the enforcement of the compulsory school-attendance law. From every school outside of New York City, Buffalo, and Rochester regular monthly reports of attendance are required by the compulsory education division of the State department of education and reports of the operation of the census law are required monthly from Buffalo and Rochester and, whenever a census is taken, from other places. The State commissioner of education may specify what information in addition to that required by law shall be collected by school census enumerators.²

METHODS OF SECURING EMPLOYMENT CERTIFICATES.

One kind of employment certificate only is issued to children between 14 and 16 years of age. Duplicate certificates, issued to children who have lost their certificates, are exact copies of the originals, and no special certificates are in use for work during vacations or for temporary work at any time. The division of employment certificates of the bureau of child hygiene in New York City also issues statements of age to children over 16 who present acceptable evidence. Employment certificates properly issued in one part of the State are legal, unless revoked, in any other part of the State until the owner is 16 years of age. A child may obtain his employment certificate either in the city, town, or village in which he lives or in that in which he is to be employed.³

No leaflet instructions with regard to securing certificates are issued in any place included in this study except in New York City and Rochester. In New York City the bureau of child hygiene of the department of health has published a 24-page pamphlet entitled "How to Obtain an Employment Certificate," which has been distributed to the school principals and which is given to parents and others at the employment-certificate office; in Rochester the health bureau issues a card containing general directions. In many of the schools in other cities special instruction is given as to the necessary requirements and procedure.

During the regular school year little difficulty is encountered in securing school records, but various provisions are made for obtaining

¹ Labor Law, secs. 75 and 166. For the text of these sections see pp. 122, 124.

² Education Law, secs. 650-652. For the text of these sections see pp. 129, 130.

³ Labor Law, secs. 71 and 168. For the text of these sections see pp. 120, 124.

them during vacation. In many schools in New York City and in Buffalo instructions for obtaining employment certificates during vacation are given at the close of the year. Children who desire school records and are entitled to them must get them before school closes or take the risk of not being able to find their principals during the summer. In Rochester instructions with regard to securing records during vacation are given all public-school children at the close of school. These records are filled in completely, except the date, for all children wishing them who have complied with the educational requirements and are of working age or will become so before September. They are kept in the office of the efficiency bureau. When a child entitled to one calls for it at that office, it is dated and given to him. The parochial-school child, on the other hand, must find the chief executive officer of his school in order to get a school record if he has not secured one before vacation. In Troy, Little Falls, and Tonawanda, where the duplicate records are in the superintendent's office, which is open during the entire year, children have no difficulty in securing school records during the summer months. In the other places visited, however, unless children procure them before school closes they must depend on the chance of finding their principals later.

The issuing offices throughout the State are open so that children may obtain certificates at any time during the year. In New York City all the borough offices at which employment certificates are issued are centrally located, convenient to those districts from which large numbers of children go to work. In Buffalo and Rochester the issuing offices are also well located to accommodate children. In cities with 5,000 inhabitants or more, other than those of the first class, the superintendent of schools, according to law, must issue the school records; and in each of these cities visited, except Syracuse the office of the board of health where certificates are issued is near that of the superintendent, often in the same building. In Syracuse the distance between the two offices is of no importance, as the school principals, instead of the superintendent, issue the records. In Victory Mills the physical examination is not given in the village where the certificate is issued but in the neighboring village of Schuylerville, about 1 mile distant.

REGULAR CERTIFICATES.

The legal requisites for obtaining an employment certificate are uniform throughout the State. They are (1) the application of parent; (2) the presentation of satisfactory evidence of age and of a school record showing fulfillment of the specified educational requirements; (4) the passing of a physical examination showing sound health and (5) of an educational test in the issuing office proving

2 H V N a s d s a n t a t t i f o o c e i 1 (i l l j e a i i ! . . .

literacy. Before the certificate is issued the issuing officer must approve the papers submitted and must sign a statement that the child is able to read and write simple sentences in the English language. The child must appear in person.¹ The law does not state how the parent must apply, and the procedure in this matter is not uniform. In some communities the parent's presence is required always; in others, only for certain purposes; and in still others it is never necessary. The evidence of age required in the order of preference specified in the law is a transcript of a birth certificate, a certificate of graduation, a passport or baptismal certificate, other documentary evidence, and in first-class cities a physicians' certificate of age.

New York City, Manhattan Borough.—In New York City when a child applies for an employment certificate he must be accompanied by his parent or by the representative of his parent and must bring with him two documents—evidence of age and a school record. A clerk at a desk near the entrance to the room examines these documents and instructs him what to do next. No application, however, is started unless some person in parental relation is present and satisfactory evidence of age is presented. At this first stage delay may be caused by the failure of the child to produce one or all of the requisites.

If a child comes unaccompanied by his parent and fails to bring any or all of the required documents, he writes his name and address on the white interview card.² The interviewer examines whatever documents the child has and, in order to make the office procedure easy when the child returns, notes on the card what requisites are missing or defective. The child is then sent away with instructions to bring his parent and the requisite documents. If the child states to the first interviewer that neither of his parents can come, he is sent to the chief clerk, who questions him more fully to ascertain positively whether neither father nor mother can appear. If he convinces the clerk of the truth of his statement, he is given a blank form³ to take home for his parent to sign and acknowledge before some notary. On this form the parent declares that he is unable to accompany the child to the issuing office and appoints some one to appear and act in his place. If the child explains to the satisfaction of the clerk that his parents are both dead, or live in another country or State, he must bring some one to sign a sworn statement⁴ to that effect and to act in place of a parent.⁵

¹ Labor Law, secs. 71 and 163. For the text of these sections see pp. 120, 124.

² New York City Form 1, p. 138.

³ New York City Form 2, p. 139.

⁴ New York City Form 3, p. 139.

⁵ Throughout the following discussion the word "parent" is used to mean anyone in parental relation to the child.

When a child presents satisfactory evidence of age, he and his parent must come together to the office. Thus if they appear without such evidence, they must both return with it unless the parent states that he has specific satisfactory evidence at home, when he is permitted to take oath and sign the application. The child then returns alone to the office and, if the evidence is as stated, it is accepted.

For a child born in New York City who comes without evidence of age this may be readily obtained, as he is sent across the hall to the bureau of records to secure a copy of his birth certificate, and, if his birth is recorded, he is there given a form¹ on which the date of birth is noted. If this date shows him to be over 14, the application is started; and if the school record is satisfactory, the entire procedure may be completed at once. If, on the other hand, his birth is not recorded, he is given at the bureau of records another form² to that effect and must return to the issuing office later with some other evidence of age acceptable under the law. A notation is made on the white interview card, so that when the child returns with such evidence the notes show what was done at the previous interview.

If the child appears without a school record but is accompanied by his parent and has satisfactory evidence of age, the application blank is started and, in order to avoid the necessity of the parent's returning to the office, his affidavit is taken at this time instead of after the child has fulfilled all the requirements. If the child states that he is in a low grade, nothing more can be done until the school record is produced. On the other hand, if the child states that he has finished the eighth grade or is in the high school, he goes through the entire procedure except that he does not receive his certificate until he has brought his school record. A child from a parochial school is given a school-record blank³ to take to the chief executive officer of his school to be filled in; one from a public school gets a similar blank, filled in on application, at his school.⁴

Delays in securing a certificate are thus caused and return trips made necessary by failure on the child's part to appear with the requisites. Delay or refusal may be caused also by the presentation of documents which are not satisfactory. For instance, a child born in a country or State which issues copies of birth certificates may present as evidence of age a certificate of graduation or a baptismal record. If a birth certificate is procurable, the child and his parent must return at a later date with this certificate. But if it can not be secured the evidence first presented may be accepted. The school record may also be unsatisfactory, usually because it does not

¹ New York City Form 4, p. 139.

² New York City Form 5, p. 139.

³ New York City Form 6, p. 140.

⁴ New York City Form 7, p. 140.

show the number of days the child has attended school. In this case the child's name and address are taken on the interview card for future reference, and he is sent to his principal to have the blank properly filled in.

If, however, the documents presented by the child are satisfactory and a birth certificate, a certificate of graduation, a passport, or a baptismal certificate has been accepted as evidence of age, the first interviewer fills in the application blank,¹ with the exception of the signature of the issuing officer and that of the medical officer, and stamps on it the kind of evidence submitted. He then administers an oath to the parent, who swears that the child is of the age specified and that he or she is the parent. The interviewer also transcribes on the form appropriate to such evidence of age the contents of the document, and both the parent and the child sign the application blank in the specified places.

The school record and the documents proving the child's age are then fastened to the application blank and given to the child to take to the physician in the examining room.

If for any reason the child does not pass the physician's examination, he is sent to the office of the borough chief, where he is examined by that officer or by the assistant chief. If the examining officer agrees with the first physician, he marks the examination sheet "R," in red ink, and signs it and also the application blank. In case he does not agree, he signs both blanks as before but does not put "R" on the examination sheet and the child may secure his certificate. In questionable cases, therefore, the decision in regard to the child's physical fitness to work does not rest with the examining physician but with the borough chief.

As a result of the physical examination the child may be refused a certificate permanently, or, if the defect seems remediable, temporarily. The treatment of the child in either case is discussed later.² In the latter case the essential facts concerning the defect are noted on a special card³ and placed in what is called a "tickler" file, which is kept on the desk for ready reference; the parent and child are given a notice of temporary refusal and are instructed how to have the defect corrected and when to return for reexamination; and the school principal is mailed a special notice explaining why the certificate is withheld, so that he may expect the child at school. If the child does not return to be reexamined, a card is sent requesting him to do so and setting another date. In case of repeated nonappearance, and in all cases of permanent refusal, a nurse is sent to ascertain whether the child has had the prescribed treatment. In case the child comes back to the issuing office with the defect corrected,

¹ New York City Form 8, p. 141.

² See pp. 49, 75.

³ New York City Form 9, p. 142.

this fact is noted on his card and he goes through the rest of the procedure as if he had passed the physical examination at the earlier visit.

If the physical examination is satisfactorily passed, the examining physician signs the application blank and the physical-examination blank,¹ the two blanks are fastened together, and the child is sent to the chief clerk, who is the issuing officer. The clerk notes on the back of the application blank the child's height and weight as they appear on the medical-examination sheet, and dictates to the child a sentence from a Third Reader. If the child writes the sentence correctly, the clerk signs the certificate, stamps it with the date of issuance and the number, and delivers it to the child. If the child fails on the first sentence, he may try two more. If he writes 2 out of 3 or 3 out of 5 sentences correctly, he is passed; but if he can not do this his papers are sent to the director of the bureau of child hygiene, with the recommendation that he be refused. The director, after investigating the facts of the case, makes the final decision as to the granting or refusing of the certificate.

Children are refused certificates whenever cause for refusal occurs at any point during the procedure. A child may appear with his parent and either state that he is under 14 years of age or bring documentary evidence which shows that fact. A child may bring a school record showing either that he has attended school less than the 130 days required by law or that he is in the second half of the sixth grade or in a lower one. A child may fail to pass the physical examination, or at the very close of the procedure he may fail in the literacy test. For the under-age child the application blank is completely filled, and the parent is sworn in the regular way. The child is then refused a certificate, the parent is given a formal statement showing the cause of this refusal,² and the application blank and the refusal card³ are stamped with the word "Refused" and also with the cause "Under age." In the other cases the procedure relating to the refusal of a certificate is the same, but the causes differ—"Insufficient tuition," if the child has not attended school a sufficient number of days or has not reached the specified grade; "Insufficient education," if he fails to pass the literacy test; or "Physical incapacity," if he fails to pass the physical examination.

When the child has to establish his age, either by documentary evidence other than a birth certificate, certificate of graduation, passport or baptismal certificate, or by a physician's certificate of age, the procedure differs somewhat from that outlined above, and the child is longer delayed before he receives his certificate. Before such evidence is accepted, indeed, the child may be obliged to make several visits to

¹ See p. 43.

² New York City Form 10, see p. 142.

³ New York City Form 11, see p. 142.

the issuing office in an effort to establish his age through one of the preferred documents. If this effort is unsuccessful he is referred by the first interviewer to the chief of the division, who advises him how to procure "other documentary evidence" or determines whether he must resort to the physicians' certificate.

When a child, after making every possible effort, is unable to bring one of the preferred documents but has other acceptable documentary evidence of age, this evidence is transcribed to a form called a "Board paper"¹ and the application blank is filled in. The child then goes through the physical examination and, up to the point of receiving his certificate, follows the same procedure as though he had brought other evidence. If the child passes all the tests successfully, the "Board paper," showing the documentary evidence of age presented, is filled out and signed by the issuing officer. Before the child receives his certificate, however, this evidence must be approved by the board of health, which usually meets every two weeks. Thus the child must wait from a few days to two weeks before he knows whether or not he is to receive a certificate. The child and parent are informed of the reason for delay, and the child is given a typewritten statement to take to the principal of his school, explaining that his application has been referred to the board of health and that he will be notified should the board decide to grant the certificate. If the board approves the evidence of age, a post-card notice is sent to the child telling him to call for his certificate on a specified day.

Every effort is made to secure other evidence before resort is had to the physicians' certificate of age. But if the child is apparently more than 14 years of age and no other evidence seems available, the parent may make a formal application for an employment certificate and a physicians' certificate of age.² The issuing officer fills out this form and administers an oath to the parent to the effect that other evidence of age can not be obtained, and both he and the parent sign the form. The regular application blank is then partly filled in and the child is given a statement to take to his principal explaining the delay. This statement informs the principal that 90 days from date the child will be notified to appear at the office for a physical examination to determine age, and that if in the opinion of the examining physicians he is at least 14 years of age the physicians' certificate of age will then be issued, and if he presents a school record showing him to be at least 14 years of age, and in the grade required by law, an employment certificate will be granted. At the end of 90 days, therefore, if meanwhile no better proof of age has been found, the child is notified to come again with his parent to the issuing office. Two physicians then examine him, and, if they agree, this evidence

¹ New York City Form 12, see pp. 142, 143.

² New York City Form 13, see p. 144.

of age is accepted. If the two physicians disagree, however, a third physician examines the child, and any two concurring opinions are final. After the physicians' certificate has been accepted as evidence of age the parent's affidavit is taken and the child is tested for physical fitness and for literacy as are other applicants.

New York City, other boroughs.—The procedure in the different boroughs is now uniform; that in Manhattan is followed elsewhere in the city. When this investigation was begun, however, there were certain points of difference in matters of office detail. The Bronx office, for instance, took precautions to assure itself that a child applying for an employment certificate had not received one at some previous time. When a child applied he was asked his name, and the card catalogue was consulted. If the name was found, the child was told to write his name, address, and date of birth on a piece of paper, and, if his signature was the same as that in the files, he was not allowed to continue with the application. If his name was not found or if the signatures were not the same the application blank was marked "O. K." in the corner.

Buffalo.—The procedure in the Buffalo issuing office resembles closely that in the New York offices. But the register of births of all children born in Buffalo who are of certificate age is kept in the issuing office for ready reference. If an applicant's record of birth is in this register or if he submits a birth certificate, the application¹ provided on the school record is signed by the parent; in this case he need not come to the office. If other evidence is presented, the parent must come to the office to make affidavit. In case a certificate of graduation, a baptismal record, or a passport is accepted, the application signed by the parent is similar to that used in Manhattan. In case any other documentary evidence or a physicians' certificate of age is accepted, special application blanks,² on which the character of the evidence is noted, are used. The board of health meets frequently, and in case the evidence presented must have its approval the child is instructed when to return for his certificate.

At the first interview much information is noted on the school record. Such points as the date of birth, the character of the evidence of age, whether or not the child's birth is recorded in Buffalo, and the parents' birthplaces aid later in the examination. No matter what the school record states, the child is questioned as to the grade he is in; and if he has not entered the seventh grade, the procedure stops there and he is told to return to school. If the school record and the child's answers are satisfactory, he is required to read from some part of the Fifth Reader and to write a sentence from dictation.

¹ Buffalo Form 1, see p. 157.

² Buffalo Forms 2 and 3, see pp. 158-159.

If he can not do both to the satisfaction of the attendant, he is refused a certificate for insufficient education; but if he can, and if his evidence of age is acceptable, he is allowed to have the physical examination. If he passes this also, his school record is stamped "Approved" and he is sent to the clerk or attendant for his certificate. The child is asked where he is going to work, and a notation as to whether it is in a mercantile or a manufacturing establishment is made on a stub record. He then signs and receives the certificate.

The examining physician in charge of the office alone decides on physical fitness. If he thinks the child is not fit, the school-record and physical-examination blanks are stamped "Disapproved," with specific cause of disapproval, and the child is told why he can not get a certificate at that time. In cases needing treatment a notice is given to the parent, if present, or to the child to take to his parent. Whenever a child who has been refused a certificate for a physical defect returns with the defect corrected, the school-record and physical-examination blanks are stamped "Approved" and "Defect corrected" and the certificate is granted.

Rochester.—The child who applies for a certificate at the issuing office in Rochester is required to bring an additional card, namely, his health-record card, showing the results of his school physical examinations. This card is used to aid in substantiating the age of the child and in checking up the work of the medical inspectors. The nurse passes on the papers and makes part of the physical examination. The child is also asked if he has been promised employment; but whether he has or not he receives his certificate. A written promise of employment was first requested by the health officer in the spring of 1914, and such promise must be produced, when possible, before the certificate is issued. This promise, however, not being a legal requirement, can not be insisted upon.

When documentary evidence of age other than a birth certificate, certificate of graduation, baptismal certificate, or passport is presented the nurse approves it and administers the required oath to the parent, and the child is not delayed by waiting for the health bureau to act. When the child has to resort to a physicians' certificate of age, the parent's affidavit is taken at the second appearance, and the names of the two physicians making the examination are noted on the corner of the affidavit blank. This is the only case in which a parent is required to appear. No educational test is given unless the child appears illiterate or can not speak English.

Other cities and villages.—In second and third class cities the laws relating to employment certificates differ in some respects from those in first-class cities. Final resort to a physicians' certificate of age is not permitted, and if a child can not produce documentary evidence of age he can not legally procure an employment certificate.

The school record must be signed by the superintendent of schools instead of by the principal of the school the child attended.

In each of the second-class cities visited the clerk of the bureau of health passes upon the documents submitted by the child and issues the certificate. His signature, not that of the health officer, is on the employment certificate. The physician making the physical examination is regarded, indeed, as the examining physician and not as the issuing officer. In the third-class cities visited the health officer performs all the work attendant upon issuing and signs certificates.

When a child appears without necessary or satisfactory documents and is therefore unable to secure his certificate at once, his name and address are not taken. But in every issuing office visited the names of children under 14 years of age who apply are recorded and such children are counted among the number of refused applicants. In Little Falls the parent must always accompany the child to the office; in Troy, Syracuse, and Cohoes only when necessary to sign a sworn statement as to the child's age; and in Albany a boy's parent must appear for this purpose, and a girl's parent must in addition accompany her at the time of the physical examination. In Utica the parent must appear at some time during the procedure to sign the application blank.¹ In Tonawanda, on the other hand, he is not required to appear at any time.

No literacy test is given at the issuing office in any of these places. In Albany such a test was given at one time but was discontinued later. Inquiry is usually made at Albany as to the character of the child's work.

In all these cities except Syracuse the child is required to go first to the superintendent of schools to have his school record filled in, or approved if previously filled in by his school principal. In Syracuse the child is obliged to make an additional trip, as he must go to the issuing office to get the school-record blank for his school principal to fill in and then has to return with it to the issuing office. One trip to the issuing office suffices in most places, however, unless the child applies at other times than the office hours of the examining physician.

The health officer at Little Falls is the only one in any of these cities who asks for other documentary evidence of age and refuses to accept a parent's affidavit without supporting evidence. The child is not inconvenienced there, however, by waiting for action of the board of health, as the officer grants the certificate but can revoke it if the board decides later that the evidence is not satisfactory. Thus far the board has always affirmed the judgment of the health officer.

¹ Utica Form 1, p. 163.

In Victory Mills the child has his school record filled in by the principal of the village school and goes with it to the clerk of the board of health, from whom he receives an affidavit blank. He takes this to his parent for the sworn signature; goes to the adjoining village of Schuylerville to be examined by the health officer; brings back to the clerk the duplicate copy of the physical examination blank; and, if everything is satisfactory, receives his certificate. Thus the child usually makes three trips, two to the clerk's office and one to the health officer in Schuylerville. Sometimes, however, he goes directly to the health officer with an affidavit and a school record, returning with all three papers to the clerk.

NUMBER AND FORM OF CERTIFICATES.

The contents of an employment certificate, as has already been noted, are specified in the law, and a model form¹ is provided by the State department of labor. In addition to conforming to the law this model has a statement concerning the physical examination and a note to the effect that the certificate is to be filed with the employer and surrendered to the child or to the person in parental relation when the child's employment ceases. Notices specifying the hours of labor in factories and mercantile establishments and calling attention to the section of the law relating to dangerous occupations for children are printed on the back of the form.

All places visited issue certificates based on this model except Victory Mills, where an old triplicate form in use before the law was changed in 1913 is used. Certificates in the old form are made out either for a factory or for a mercantile establishment, and under the old law they could not be used in any other kind of an establishment than that specified. In New York City the form differs from the model² in providing for distinguishing physical instead of facial marks and has additional spaces for the address and sex of the child. These data are meant to aid in identification in cases where confusion might arise on account of foreign names. Of 23 cities, other than those visited, from which certificates were obtained all but 2 use forms based on the model, and these 2 use the old triplicate form.

Though the law provides for only one copy of an employment certificate, the number varies. In New York City, Buffalo, and Utica only one copy is made out, but in the last two cities stub records of the essential facts shown on the certificate are kept for use in case it is necessary to make a duplicate. In Rochester, Albany, Troy, Little Falls, and Tonawanda certificates are made out in duplicate, one copy being given to the child and the other filed in the office. In Syracuse and Victory Mills three copies are made; one of these is given to the child, one is retained at the office, and one is sent to the office of the State industrial commission.

¹ Form 2a, pp. 134, 135.

² Form 2b, p. 135.

VACATION AND TEMPORARY CERTIFICATES.

No vacation or temporary certificates are issued in New York State. If a child wishes to work during vacation, before or after school hours, or on Saturdays, he must comply with the same requirements as though he intended to leave school permanently to go to work. Furthermore, a child is not allowed to work while waiting for acceptable evidence of age.

LOST CERTIFICATES.

The law makes no provision for an additional certificate in case the original is lost; but in the cities visited the issuing officer gives the child a duplicate which, except in Buffalo,¹ is on exactly the same form as the original, though in New York City such duplicates are plainly stamped "Duplicate." In the New York City offices a fee of 50 cents is asked for a duplicate; the child must sign a form² setting forth the manner in which the first certificate was lost; and, according to a ruling of the department of health, the parent must accompany the child. This rule is generally adhered to, as it aids in assuring the issuing officer that the child has actually lost the old certificate and is not securing the new one for another child. Since early in 1915 the practice has been to require the child to wait at least one month before a new certificate is issued. When assurance is given, usually by a note, that the employer lost the certificate, the parent need not accompany the child, and a new certificate is issued at once. In such a case the employer, informed by the issuing officer of the required fee, often pays it, but if he does not, the child must do so. Occasionally, when the imposition of the fee seems an injustice, the duplicate is given to the child free of cost. In New York City 1,555 duplicate certificates were issued in 1915.

In Buffalo, when the child wishes a duplicate certificate, he must come to the issuing office accompanied by his parent. The stub of the original certificate is consulted for the necessary data and the parent is required to swear as to the manner in which the certificate was lost. A fee of \$1 is charged, and an attempt is made here also to persuade the employer, if he lost the original, to pay for the duplicate copy; but if he will not the child must do so. In Rochester the child must apply in person and be reexamined, chiefly for defective teeth. No fee is charged, but the child is usually required to wait a week for the copy. If, however, the child brings a note from an employer stating that he has lost the original certificate or that he intends to employ the child, the duplicate is granted immediately.

In none of the other cities visited is any fee required, but the child is sometimes questioned and required to return a second time for the

¹ Buffalo Form 4, pp. 159, 160.

² New York City Form 14, p. 145.

duplicate certificate. At the Utica office, if the child says that the employer lost the original certificate, he must bring a written statement from the employer to that effect before the duplicate is issued.

OVER-AGE CERTIFICATES.

In New York City the bureau of child hygiene of the department of health issues to a child over 16 years of age a statement¹ certifying that his proof of age has been investigated and is satisfactory. This statement is also issued to a child who claims to be over 16 but who can not present satisfactory proof of age, providing a physical examination made by a physician of the bureau indicates that he is over 16. It is frequently issued upon the request of an employer, and a child can not procure a second copy.

Until October 1, 1915, in New York City the department of labor issued to a child over 16 years of age a statement certifying that evidence satisfactory under the law for an employment certificate was filed in the office showing that the child was over 16 years of age. This statement was also issued upon the request of an employer, and a child could not procure a second copy.

EVIDENCE OF AGE.

Any one of four kinds of documents may be used by a child to prove his age to an issuing officer in New York State. In order of preference these are as follows:

- (a) A duly attested transcript of a birth certificate.
- (b) A certificate of graduation from the eighth grade, provided the school record shows that the child is at least 14.
- (c) A passport or a duly attested transcript of a baptismal certificate showing the date of birth.
- (d) Other satisfactory documentary evidence of age.

A fifth document may be presented in first-class cities only, namely:

- (e) A physicians' certificate of age based on a physical examination.

When evidence other than a birth certificate is presented the parent, according to law, must appear in person before the officer issuing the certificate and must file an affidavit stating that other evidence can not be secured. For this affidavit no fee can be collected at the issuing office.²

To prevent effacement, the date of birth is perforated on the employment certificate in Buffalo and in Rochester. In the other offices it is written.

¹ New York City Form 15, p. 145.

² Labor Law, secs. 71 and 163. For the text of these sections see pp. 120, 124.

In New York City and in Buffalo the order of presentation prescribed in the law is strictly observed. In Rochester birth certificates, baptismal records, and passports are regarded as equally acceptable, and a certificate of graduation is accepted not only if the child's birth is not recorded but also if the record is difficult to obtain. In the second-class cities—Albany, Troy, Syracuse, and Utica—the birth certificate is first demanded, then the baptismal record or passport. In the absence of both these kinds of evidence the parent is required to swear before the commissioner of deeds or designated officer in the bureau that the child is of a certain age and that no other proof of age can be obtained. This parent's affidavit is frequently accepted without any supporting evidence. In Little Falls the proofs of age are required usually in the following order: Birth certificate, baptismal record, and parent's affidavit accompanied by other documentary proof. In Tonawanda the birth certificate is preferred, then the baptismal record; but occasionally some other document is accepted. In Cohoes and Victory Mills no special order of presentation is observed, but a parent's affidavit unsupported by any other document is the usual evidence.

Outside the first-class cities none of the offices visited demanded the certificate of graduation, and in none of them were the officers at the time of this investigation cognizant that such a certificate was acceptable as evidence of age.

TRANSCRIPT OF BIRTH CERTIFICATE.

Native-born children.—A law providing for compulsory birth registration has existed in New York State since 1853 but has not been effectively enforced until recently. In 1900, it was estimated, only about 78 per cent of the births were recorded, but in 1914 the State department of health claimed 99 per cent. A new law, effective January 1, 1914, gave the State commissioner of health power to remove local registrars and to prosecute local violators of the law. This law, it is claimed, will for the first time guarantee birth registration in the State. New York City, however, has always had a law different from that of the State and has enforced birth registration since 1909. In 1900 between 85 and 90 per cent of the births were registered, and the office of the registrar of vital statistics claims to get 99 per cent at the present time. Obviously, therefore, the child born in New York State who applies for an employment certificate can not yet be assured that the record of his birth will be on file.

The law requires "a duly attested transcript of the birth certificate." This does not necessarily mean the certified copy for which registrars may charge a fee of \$1.¹ No provision is made for searching the rec-

¹ Consolidated Laws 1909, ch. 45, art. 20, sec. 391, as added by Acts of 1913, ch. 60.

ords, but in none of the cities visited was a fee charged for doing so when the date of birth was wanted for school registration or for employment. The registrars in some places, however, are not willing to consult the records for such purposes and often, therefore, other evidence of age is accepted by the issuing officers. In New York City, Buffalo, and Rochester, when a request is received for the date of birth of a child born in the city, the information is furnished free to a child between 14 and 16, and in Rochester also to a 16-year old child who states that he wants it to prove his age to an employer.

In New York City a register of the births of all children born in Greater New York is kept in every borough office, and when such a child applies for a transcript it can be easily ascertained whether his birth is recorded. In Buffalo, Rochester, all the second-class cities visited, and Tonawanda the birth records are in the offices where certificates are issued, and for a child born in one of these cities the records are always consulted before other age evidence is accepted. In Little Falls, Cohoes, and Victory Mills the clerks of the boards of health have the birth certificates, but as they are also engaged in other business such records often are not consulted.

In Buffalo and Albany, if the name on the register differs from that on the school record or from the one the child gives, the parent must make a sworn statement before the commissioner of deeds that the two names are those of the same child.

In proving the age of a child born elsewhere in the United States difficulties are encountered, although the child is not greatly inconvenienced. Often, it is true, his birth certificate can not be obtained, but the answer to his request for one is soon forthcoming and other evidence can usually be secured. The Buffalo office instructs the child who claims to have received no reply to a request for a transcript of his birth certificate to send a special-delivery letter. If such a letter is returned, it is filed in the office and accepted as proof that the record does not exist. The office does not accept other evidence of age until it has written proof that a transcript of the birth certificate can not be obtained.

In Manhattan Borough, during the year 1913, 11,221 out of 14,367 native-born children receiving certificates, or 78 per cent, presented transcripts of birth certificates as evidence of age.

Foreign-born children.—Before the beginning of the European war a foreign-born child, in some offices, was required to present if possible a transcript of a foreign birth certificate. In case he did not have one he was compelled to send for one, and a long delay often occurred before it was received. Meanwhile the child was obliged to stay in school. In New York City, even since the beginning of the European war, such transcripts have frequently been demanded from

children born in countries not considered to be too seriously affected either by the war itself or by the resulting irregularity in the mails; but the practice has become less common as the war has continued.

Foreign-born children applying for employment certificates in New York City, Buffalo, and Tonawanda were always required to secure if possible copies of their birth certificates. Occasionally also they were required to do so in Rochester, Albany, and Syracuse, but never in Troy, Utica, Cohoes, Little Falls, or Victory Mills. Instructions were always given in regard to securing such certificates in New York City and Buffalo; rarely in Albany and Syracuse, and never in Rochester and Tonawanda.

The New York City office kept thoroughly informed of conditions in European countries which affected birth registration, and when a child claimed to have been born in a foreign city where birth certificates had been destroyed he was instructed what other evidence to bring. On the other hand, a child born where birth certificates were available was given a printed slip made out for the particular country of his birth and was instructed to fill it in and send it, together with the necessary fee—the amount of which was specified—to the proper official, whose exact title and address were given him.¹ The parent was instructed to send a registered letter and to keep the receipt in order to present it if no reply were received. At times a parent or child wrote to a relative or friend in the home country, asking him to secure the birth certificate. A letter received from such a person, stating that the birth certificate could not be obtained, was generally accepted, but in some suspicious cases the parent was required to write, as previously instructed, to the proper person. When such evidence was received, the office transcribed the essential facts on a special form² and returned the original paper to the child. Special difficulty was experienced with the Jewish child whose birth often was not recorded or whose certificate was difficult to obtain. In parts of some countries the births of Jewish children are recorded as illegitimate because the parents were married and the children born outside the State religion; their parents, consequently, often objected to procuring these records; and at times the office did not insist, but accepted other evidence.

At the Manhattan office 5,733 foreign-born children received certificates in 1913; 3,639, or 64 per cent of them, presented birth certificates as evidence of age; 543, or 9 per cent, graduation certificates; 403, or 7 per cent, baptismal records or passports; 972, or 17 per cent, other documentary evidence; and 176, or 3 per cent, had to resort to physicians' certificates of age.

¹ For this purpose the pamphlet of instructions, *How to Obtain Foreign Birth Certificates*, issued by the New York Child Labor Committee, was constantly used.

² New York City Form 16, p. 145.

In Buffalo, when a child was instructed to write for a copy of his birth certificate, he had to return with the copy or with a letter stating that the birth was not recorded. He was not instructed to keep the receipt to show, in case he received no reply, that he had actually written, for he was required to write again and again until he received a reply. Otherwise he could not get a certificate.

In Rochester the child or parent was simply told to write for a transcript of the birth certificate. A statement of the date of birth was accepted when written on a plain piece of paper if signed by the proper official.

In Albany and Syracuse, if a child came to the office with a baptismal record or passport, the document was usually accepted and the child was not directed to write for a transcript of his birth certificate. In Utica and Troy the issuing officers had no knowledge of the countries from which birth certificates could be secured, and consequently a child's statement regarding his ability to secure such a paper was accepted; in Little Falls, Cohoes, and Victory Mills, even though the officers had such knowledge, the child was not required to procure a transcript of his birth certificate. In Tonawanda the health officer usually knew whether a child had written for his certificate and accepted his word about the reply.

In Manhattan and Brooklyn Boroughs, where most of the foreign-born children apply, there was, until early in 1915, some one in the office to translate documents, and in the other boroughs the chief of the division was called upon for this purpose. In other places, unless the foreign document was easily translated, the issuing officers depended upon a translation by a priest, a notary, or sometimes the child.

CERTIFICATE OF GRADUATION.

The second evidence of age to be accepted is the grammar-school certificate of graduation. To make such evidence acceptable proof of age it must be accompanied by a school record showing the child to be at least 14 years of age. The provision really means, therefore, that the evidence of age presented and accepted is that appearing on the records of the school the child has attended. Of the 20,100 certificates issued in Manhattan in 1913, 1,084, or 5 per cent, were granted on this evidence of age. It is interesting to note that 9 per cent of the foreign-born children, but only 4 per cent of the native children, presented this evidence. If a diploma is acceptable, its contents are transcribed in the New York City offices to a regular form.¹ In Buffalo a note of the kind of evidence produced is made on the application blank.

¹ New York City Form 17, p. 145.

In Rochester, if a child comes without his diploma, he is not required to return for it providing the school record shows that he has finished the eighth grade.

PASSPORT OR BAPTISMAL CERTIFICATE.

A passport or baptismal certificate is the third choice as evidence of age under the law. In New York City, when instructions are given to a foreign-born child how to proceed in securing a birth certificate, additional instructions are usually given with regard to the passport or baptismal record in case the birth certificate can not be obtained. The evidence from a passport is copied on the same form as that used for a birth certificate. A transcript of a baptismal certificate must be signed by the pastor or priest and the seal of the church must be attached. The evidence on it is transcribed in the certificate office to a special form.¹ In Manhattan Borough 2,316 children who received certificates in 1913 proved their ages by baptismal certificates or passports. The majority of these children were native born; consequently more baptismal certificates than passports were accepted.

In Buffalo, when a baptismal record is accepted, it is retained in the office if not too cumbersome; otherwise it is transcribed to a form similar to that used in New York City. At the Rochester office a baptismal record, even when written on a plain piece of paper with no church seal attached, is customarily accepted from a child unless his birth is registered in the city; and a passport is commonly accepted from a foreign-born child.

In the second-class cities visited this evidence—a baptismal certificate or passport—is accepted if presented by a child born elsewhere than in the city or by a child born in the city whose birth is not recorded. In Albany a copy is made of the certificate, but in the other places the original evidence is kept on file. In Little Falls, where most of the applicants are Catholics, a baptismal certificate is the usual evidence of age presented and accepted. In Cohoes, also, most of the applicants are Catholics, and baptismal certificates would be easily obtainable; but they are rarely demanded and are accepted only if they bear the seal of the church and are accompanied by the sworn statement of the parent. In Tonawanda, if the applicant can get neither a birth nor a baptismal certificate, he can not obtain an employment certificate.

OTHER DOCUMENTARY EVIDENCE OF AGE.

Under the law the issuing officer is himself permitted to accept the different kinds of evidence of age thus far discussed. For the acceptance of any other documentary evidence of age the approval of

¹ New York City Form 18, p. 146.

the board of health is required. If a birth certificate, graduation certificate, passport, or baptismal certificate can not be produced, but if other documentary evidence of age satisfactory to the issuing officer is available, the issuing officer must present to the board of health a signed statement showing the facts, together with the evidence of age produced, and the board of health, at a regular meeting, may by resolution provide for receiving such evidence as it approves.¹

Before other documentary evidence of age is accepted in New York City the child is required to furnish documentary proof that a birth certificate or certificate of graduation is not obtainable; but his statement is usually accepted regarding his inability to procure a baptismal certificate or passport, because the child, it is believed, will bring such evidence rather than wait unnecessarily while the board of health passes on the "other documentary evidence" of age.

Certain kinds of documentary evidence of age have been presented and accepted in one office and other kinds in another. But in any of these offices any proof of this sort which a child might present, if considered authentic, would be accepted. A life insurance policy is usually considered the best and is accepted in all the first-class cities, as is also a Bible record which appears to have been made near the time of the child's birth. A Jewish barmizvah paper² is accepted in New York City but not in Rochester; and at the time of this investigation such evidence had never been offered in Buffalo. The census age certificate³ from the bureau of attendance, though by some considered of doubtful value as documentary evidence of age, is frequently used in New York City. No similar records, however, are in use in Buffalo or Rochester. Vaccination certificates, if official and not from private doctors, are accepted in New York City. But such certificates are not accepted in any of the other offices visited except in Rochester. The New York City offices have accepted a certificate from the United States Immigration Bureau, a hospital record, a statement of age from the children's court, and the date of birth on a christening cup. The Buffalo office has accepted a record of the Catholic Orphan Asylum, and the Rochester office accepts any authentic statement regarding a child's age—for example, an old letter written at the time of the child's birth to an aunt and showing the exact birthday.

Of the 20,100 certificates issued in Manhattan in the year 1913, 1,529 were issued on some sort of documentary evidence of age other than a birth or baptismal certificate, certificate of graduation, or

¹ Labor Law, secs. 71 and 183. For the text of these sections see pp. 120, 124.

² New York City Form 19, p. 146.

³ New York City Form 20, p. 146. When a child applies for a census age certificate and no record of his age is found on file he is given a yellow card stating that fact.

passport. This evidence was accepted from 17 per cent of the foreign-born children receiving certificates as against 4 per cent of the native born. In Buffalo, from October 1, 1913, to September 1, 1914, only 20 children had to bring other documentary evidence of age.

The board of health in New York City has always approved the evidence of age accepted at the issuing office, but the board in Buffalo has not done so in every case. In Rochester, as already shown, other documentary evidence of age is not submitted to the board of health but is approved by the nurse.

In Little Falls the health officer accepts from the school principal a statement of the number of years a child has attended school and of the age at entrance. On the strength of this statement the parent's affidavit is accepted and the certificate is issued. After issuance the officer submits the facts to the board of health. Thus far the board has not disapproved the issuance of any certificate, but it is said that if it should do so the certificate would be revoked.

PHYSICIANS' CERTIFICATE OF AGE.

In cities of the first class—but nowhere else—in case no satisfactory documentary evidence of age can be produced for a child who is apparently at least 14 years of age, the law provides that the issuing officer may receive an application signed by the parent for a physicians' certificate of age. In order to allow ample time for "an examination to be made of the statements contained" in the application, and also probably in order to discourage the use of this evidence of age except as a genuine last resort, the law provides that the application must remain on file for at least 90 days before the examination is made. In case "no facts appear within such period or by such examination tending to discredit or contradict any material statement of such application," the issuing officer may direct the child to appear for examination before two officially designated physicians, and if these two physicians agree that the child is at least 14 years of age their written certificate to that effect must be accepted as sufficient proof of age. If the two physicians disagree, the child must be examined by a third physician and the concurring opinions decide the age of the child.¹

This last resort under the law is unsatisfactory, and it is important that every means of proving age by documents be exhausted before it is resorted to. The parents, considering that the long delay of 90 days during which the child must stay in school is a hardship, usually present, if possible, some other evidence of age.

This examination to determine age is never made unless the child appears to be over 14. Its exact nature could not be ascertained,

¹ Labor Law, secs. 71 and 163. For the text of these sections see pp. 120, 124.

but the physicians state that it is different from that for determining physical fitness to go to work.

In Manhattan Borough, during the year 1913, only 211 certificates were issued on physicians' certificates of age, most of them to foreign-born children. This evidence is rarely resorted to in the other boroughs.

In Buffalo physicians' certificates of age have been resorted to only occasionally. The board of health always approves such evidence before it is finally accepted. As in New York City, this certificate is based on the judgment of two physicians in the employ of the board of health. In Rochester, when a physicians' certificate of age is accepted, the parent's affidavit form ¹ is used and the necessary data are written on the back of the form.

PARENT'S AFFIDAVIT.

Under the law a parent's affidavit must accompany all evidence of age except a birth certificate. The practice differs widely, and the Buffalo office was the only one visited in which the requirements of the law were strictly adhered to. In New York City the affidavit accompanies all evidence of age, but in Rochester only other documentary evidence or a physicians' certificate of age. In Cohoes the sworn statement of the parent must accompany the baptismal record, a requirement in no other second or third class city visited.

A parent's affidavit of age unsupported by documents to prove a child's age is not provided for in the New York labor law unless such an affidavit is considered "satisfactory documentary evidence." Nevertheless, such affidavits are commonly accepted in Albany, Troy, Utica, and Syracuse. They must be taken, however, before the notary in the issuing office. In Cohoes and Victory Mills, almost without exception, the parent's sworn statement of age is the only proof demanded. In Cohoes this statement must be made before the clerk of the board of health; in Victory Mills the affidavit, for which the parent must pay a fee, may be taken before any notary. In Little Falls an unsupported affidavit is never accepted.

The forms used for affidavits are similar throughout the State.

DISPOSITION OF DOCUMENTS.

All original evidence of age presented in New York City is given back to the child after it has been stamped to show that it has been once used at the issuing office. This stamp, it is believed, prevents future use of the same evidence by another child. Returned documents are not stamped in any other place visited in the State, nor is there any uniformity about returning evidence. In Buffalo tran-

¹ Rochester Form 1, p. 16L

scripts of birth certificates, passports, certificates of graduation, and baptismal certificates—except those convenient for filing—are returned to the children. Other documentary evidence is filed in the office. In Rochester birth and baptismal certificates and passports are sometimes returned to the child and sometimes filed in the office, but certificates of graduation and other documentary evidence are always returned to the child. At Albany and Little Falls all original evidence except a transcript of a birth certificate is returned. In the other places visited all original evidence is filed in the issuing office.

PHYSICAL REQUIREMENTS.

The physical requirements for an employment certificate are specified in the labor law only in a general way. Provision is made that the issuing officer shall sign and file in his office a statement that the child making application for an employment certificate is "in sound health and physically able to perform the work which it intends to do," and also that "in every case, before an employment certificate is issued, such physical fitness shall be determined by a medical officer of the department or board of health, who shall make a thorough physical examination of the child and record the result thereof on a blank to be furnished for the purpose by the State commissioner of labor [industrial commission] and shall set forth thereon such facts concerning the physical condition and history of the child as the commissioner of labor [industrial commission] may require."¹ As health officers were reminded by the department of labor when this provision went into effect in 1913, it is a penal offense to issue an employment certificate to a child without first making a physical examination in accordance with the requirements of the blank prescribed by that department.²

The industrial commission, it will be seen, is given power to decide the essential points to be noted in a physical examination, and it may be inferred that if a child is sound in all particulars mentioned he will generally be considered physically fit to go to work. At any rate, the data demanded by the commission are those which the local examining physician must record, and the examination must be given with this end in view.

The form in use, filled out and with the points checked for a typical healthy child, is shown on the opposite page.

¹ Labor Law, secs. 71 and 163. For the text of these sections see pp. 120, 124.

² Penal Law, sec. 1275. For the text of this section see p. 131.

When the law went into effect, in 1913, the department of labor issued the following instructions, in addition to those on the form, as to the method to be adopted in making the various tests:¹

Eyesight.—Use the Snellen test card. Ability to read the 20-foot section or test at a distance of 20 feet to be considered perfect. If child is unable to read the letters correctly at that distance, move him nearer, the distance to be shortened 2 feet at each test. Each eye to be tested separately, checking the number corresponding to the distance at which he reads the test correctly. In the illustration the "right" eye is checked at 16 and the "left" at 14.

Hearing.—Test each ear separately. Use an acoumeter (a simple instrument, costing \$1). Ability to hear the click of this instrument at 14 feet is to be regarded as perfect; lessen the distance (2 feet at a time) for those who can not hear, until they indicate their ability to count the number of clicks made by the tester. In our illustration above, the child is made to hear at a distance of 10 and 12 feet, respectively.

Weight.—Use accurate scales. Beware of efforts to increase weight by heavy substances in pockets or elsewhere about the person.

Teeth.—"Bad" should indicate marked decay.

Pulse.—To be taken at wrist, child sitting.

Condition of pharynx—palate.—Indicate in writing if tonsils are "hypertrophied," palate "cleft," or any other unusual or marked condition; if "normal," state that fact in writing.

Hernia.—Record should be based upon answers to inquiries, not on actual examination.

The industrial commission furnishes to every health officer a book of blank forms for recording the results of all physical examinations, whether resulting in the issuance or refusal of a certificate. In these books alternate blanks are perforated, and these perforated blanks must be filled out, by the use of a carbon sheet, as duplicates of the original record. All such duplicates must be sent, between the 1st and 10th of each month, to the office of the department of labor at Albany.²

PROCEDURE.

In describing the physical examinations given in the places visited, the points on the blank form will be followed and variations from them noted.

In the New York City office all points on the form are checked. The nurse assists the examining physician by filling out the blanks and by questioning the child concerning the date of vaccination and the parents' birthplaces. She also often weighs and measures him. For the average applicant the examination requires about 5 minutes, but for the child who has some physical defect which the physician thinks might unfit him for work the time varies. Special attention is given to children with heart trouble, and the bureau of

¹ Circular letter to health officers issued by the New York State Department of Labor, Sept. 30, 1913.

² Data from the physical examination blanks were used in a pamphlet entitled "Heights and Weights of New York City Children 14 to 16 Years of Age," by Dr. Lee K. Frankel and Dr. Louis J. Dublin, Metropolitan Life Insurance Co., New York, 1916. Similar data for the entire State have been compiled, and will soon be published, by the bureau of statistics and information of the industrial commission.

attendance, when notified of a refusal for this cause, endeavors to have special provision made for the child by the school principal, such as placing him in a class on the ground floor of the school building and seeing that he is not overstrained.

The examination in the other cities and towns visited resembles that in New York City and requires from 3 minutes in some places to 10 minutes in others. In Albany, Little Falls, Utica, Syracuse, Troy, and Cohoes about 5 minutes is required for the average applicant; in Rochester about 10 minutes; and in Buffalo and Victory Mills from 3 to 5 minutes.

In New York City and in Buffalo an attendant assists the physician during the examination. In Albany and Troy the clerk of the board of health checks up the points on the blank during the examination, but elsewhere the physician performs all the clerical work.

In all the offices visited a girl is examined in practically the same way as a boy. In New York City, however, the nurse or female attendant must be present during the entire examination; in Albany and Little Falls the girl's parent must be present.

The examination for the most part aims to determine the physical condition of the child. Physicians in Rochester, Albany, Little Falls, Cohoes, and Victory Mills ascertain, if possible, the character of work the child expects to do and make the examination with that in mind. The Albany physician cited an instance of an applicant who had no sight in one eye and defective vision in the other. The child was attending high school regularly and wanted to work at a newspaper stand after school hours. Ordinarily, the physician said, he would have refused the certificate, but for such a child, who wished to finish high school, he felt that the outdoor work would be desirable and granted the paper. In Little Falls, where most of the children go to work in the knitting mills, the physician thinks it is very important to make sure that the child has no physical defect which will be aggravated by that work. The health officer at Victory Mills stated that he watched particularly for any defect of the lungs, as he thought no child with lung trouble should be allowed to work in the cotton mills. In Rochester a child is sometimes required to be reexamined a few days after the first examination to see whether suspicious symptoms still exist or have disappeared.

In Rochester, in addition to the information required on the form, certain extra-legal points are ascertained from the child or from the parent. These points, which are recorded on the regular physical examination blank, include the father's and mother's occupations, or the family's source of support if the parents are dead; the number of children in the family under 14 years of age and the number older, and, if possible, the occupation of those over 14; whether the family owns, rents, or is buying a home; the children's diseases the child has

had before and after the age of 7. Although the facts which these questions bring out have considerable bearing on whether or not the child receives a certificate, still they can not legally be made the basis for refusal. But if they show, for example, that the child apparently does not need to go to work or that he wishes to stay in school, the certificate may be refused on some other ground.

TESTS.

In the following descriptions the test used in New York City is given and is used as a basis for comparison of the tests used in the other offices visited. Evidently, however, the nature of the tests may vary from time to time.

Eyes.—In New York City the child's eyes are tested at a distance of 20 feet from Snellen's chart, each eye separately and then both together, as prescribed on the blank. In Rochester, Troy, Little Falls, Cohoes, and Tonawanda the test is much like that in New York. In Utica it is made at a distance of about 12 feet from the chart, the calculation being based on 12 feet, and the fifth line from the bottom is used. In Buffalo both eyes are tested at once at a distance of 15 feet from the chart, which is lighted by electricity; and in Albany, Syracuse, and Victory Mills the distance is about 16 feet. Lighting conditions differ, however, in the various offices. In New York City the eyelids are examined to detect trachoma or other serious eye diseases. In the other places no such examination is made unless the appearance of the eyes arouses suspicion.

Ears.—In New York City each ear is tested by an acoumeter. In Troy, Utica, and Albany a watch is used. In the other offices no special test is made, as it is believed that if the child can understand what is said in an ordinary tone of voice he can hear well enough to go to work. Special tests are made, however, in most places if anything peculiar is noted about a child's hearing.

Oral cavity.—In New York City the teeth and throat are examined at the same time, and enlarged glands are determined by external examination with the hands. In all the other offices visited the teeth and throat are examined in a similar manner. In New York City the test of breathing consists of closing each nostril in turn and either feeling the breath with the hand or listening to the breathing. In Buffalo, Albany, Syracuse, Troy, Utica, and Tonawanda the child is questioned or his general appearance is observed. In Rochester mouth breathing is detected by the shape of the nose and the condition of the throat. In Cohoes, Little Falls, and Victory Mills no test is made.

Lungs and heart.—In New York City the heart and the lungs are tested in front, according to instructions, with a stethoscope on the bare chest. During the examination the child is required to take

full breaths and sometimes to cough. At times the lungs are also examined in the back. In Cohoes the heart and lungs are tested as in New York City. In Utica both the front and back of the chest are bared and examined with a stethoscope. In the Bronx, when any indication of trouble with the lungs is found, the child's temperature is taken and if abnormal the child must return in a few days for another examination. In Little Falls and sometimes in Buffalo the physician does not use a stethoscope but places his ear on the chest over the clothing and listens. In Rochester the bare chest is tapped during the examination, and, if any abnormal resonance is found or if the child has a cough or imperfect expansion, the temperature is taken and the back as well as the front of the chest is examined with the stethoscope. Usually in Buffalo and always in Albany, Troy, Syracuse, Tonawanda, and Victory Mills the stethoscope examination is made through the clothing.

Vaccination.—In New York City the child is questioned concerning vaccination and the reply is simply noted on the blank. This is also done in Cohoes and Victory Mills. In Albany, Troy, and Utica, and usually in Buffalo, the child must show the scar, but in Rochester only if he is from a parochial school. In Syracuse, Little Falls, and Tonawanda the child is not questioned.

Joints and spine.—In New York City joint and spinal trouble are detected by feeling the joints, by running the fingers down the spine, and by observing the child's general carriage. This method is also used in Troy. In Buffalo the child is required to swing the arms and legs vigorously while walking. In Rochester he is questioned as to his ability to swim, and his general carriage is observed. In Albany the child must move arms and legs vigorously; in Utica, Cohoes, Tonawanda, and Victory Mills he is questioned regarding his joints; and in Syracuse his general carriage is observed.

Hernia.—In New York City boys are questioned regarding hernia. In every other office visited this point is omitted.

Height and weight.—The tentative minimum standard of height in New York City is 4 feet 8 inches; that of weight is 80 pounds. These standards are usually adhered to, for if a child falls below either of them and his muscular development is poor, or if he appears anemic, it is usually considered to indicate malnutrition, and he is held to be physically unfit to work.¹ In Buffalo, if a child is apparently in sound health, no standards of height and of weight are observed; nor are they in Rochester, if there is no other physical defect. No established standards of height or of weight exist in the other places visited.

¹ Not infrequently children put heavy articles in their clothing so as to raise themselves to the required weight. In the Manhattan office a small, apparently anemic boy, who had been previously refused because he was underweight, appeared wearing heavy boots and begged to be weighed with them on so that he might go to work.

Other tests.—The existence of anemia, goiter, clubbed or cyanotic fingers, and the presence of a contagious disease are watched for during the examination in every place visited.

CAUSES FOR REFUSAL OF CERTIFICATES.

In most of the issuing offices visited, if the physical examination reveals defects which appear to be remediable by proper treatment, the certificate is temporarily refused; that is, it is withheld until the child comes again to the office with the defect corrected. In every instance of a temporary refusal it may be assumed that, unless the defect is corrected, the child is permanently refused permission to work. Thus it may happen that in some places a certificate has never been permanently refused because no child has ever applied who had defects which could not be corrected.

For what physical defects any office, if actually confronted with the problem, might refuse a certificate can not be stated definitely, as certain defects may have come to the attention of one office but not of another. The standards and the emphasis placed upon particular defects differ, as might be expected, in the various offices of the State. As a matter of fact, children in New York City are temporarily refused certificates for signs of malnutrition as indicated by their falling below the standard of height or weight or by their anemic condition; for markedly defective eyes, ears, or teeth, greatly enlarged tonsils, contagious skin diseases, prominent glands, bronchitis, or serious physical deformity. No child ever has received a certificate who showed indications of tuberculosis or who had heart disease or trachoma.

In Buffalo certificates have been refused for pronounced adenoids, heart disease, tuberculosis, and orthopedic trouble which can be corrected.

In Rochester defective teeth are the most frequent cause for which children are refused certificates. No matter how slight the defect, it must be corrected and the teeth be put in sound condition before the certificate will be granted; and if a tooth which needs specific treatment is removed instead of being given such treatment, the child does not receive a certificate. The health officer insists that the teeth be in perfect condition, as he believes defective teeth have a very close relation to a child's general health. Indications of tuberculosis, heart murmurs without compensation, spinal curvature, or any other serious deformity, such as flat foot, must also be overcome before a certificate will be granted, and no child is given a certificate until he has been vaccinated.

In Albany certificates have been withheld from children who had defective vision, greatly enlarged tonsils, or a contagious disease, or

who had not been vaccinated. However, if the defect is of a kind that will not be aggravated by the work which the child proposes to do, the certificate may be granted. When any child comes to the bureau of health to be vaccinated he must be accompanied by his parent or guardian or must bring a written statement from one of them consenting to the vaccination. At Troy certificates have been refused for physical deformity, defective vision, Pott's disease, neglect or refusal to be vaccinated, indications of tuberculosis, and heart murmurs. In Syracuse certificates have been refused for defective vision and for failure to be vaccinated; in Utica for defective vision, adenoids, sore throat, or decidedly enlarged tonsils; and in Little Falls for defective vision and also for malnutrition, as work in mills, although not necessarily dangerous, is considered taxing enough to sap the vitality of a child who is not strong. In Cohoes certificates have been occasionally refused for defective vision, indications of tuberculosis, and physical deformities which would interfere with work; and in Tonawanda for weakness and anemia. In Victory Mills certificates have never been refused.

TREATMENT OF REFUSED CASES.

In New York City children who are refused certificates because of slight or serious physical defects are referred daily to the school nurses, who visit the homes to see that the children follow the treatment prescribed and who make regular reports. The nurse in the office also keeps a record of all such cases until the children return. Very anemic children are sometimes sent into the country by the department of health.

In Buffalo these children are placed in the care of school nurses, but no reports are made as to whether the child follows the prescribed treatment. Only when the child returns is a record made of the correction of a defect. When the parent or child claims to be too poor to secure treatment for defective vision or bad teeth, a note is given him to take to the free dispensary. Before treatment is given, all such children are reported by the dispensary to the overseer of the poor, who ascertains whether poverty actually exists.

In Rochester children with defective teeth may secure treatment at the free dental clinic, and if they return to the issuing office they are reexamined to see whether the special defect has been corrected.

In Little Falls and Tonawanda, when the health officer refuses a certificate to a child for any cause whatever, he notifies the superintendent of schools, so that the child may be returned to school. But neither in these two places nor in the remaining places visited is the child followed up to see that the treatment recommended for physical defects is actually received.

PHYSICAL EXAMINATION IN FACTORIES.

Additional protection is thrown around a child between 14 and 16 years of age working in a factory by the provision that any such child shall submit to a physical examination whenever required by a medical inspector of the industrial commission. If a child refuses to submit to the examination, or if as a result of the examination he is found physically unfit to be employed in a factory, his employment certificate may be canceled. If the child later submits to the examination, or if on subsequent examination the physical defects are found to have been removed, his certificate may be restored to him and he may be allowed to work. The child's employer and the local board of health are notified both of the canceling and of the regranting of his certificate. When a certificate is canceled it must be delivered by the employer to an authorized representative of the industrial commission. The results of all physical examinations must be recorded on blanks furnished for that purpose by the industrial commission, and a special form has been devised for recording cases of children whose certificates have been revoked because of physical unfitness.¹

The division of medical inspection has existed since 1909, when provision was made for at least three medical inspectors—one of whom should be a woman—and the section providing for the physical examination of minors in factories has been on the statute books since 1913. Up to November, 1915, however, very few inspections had been made for this purpose, and the law was practically a dead letter.

EDUCATIONAL REQUIREMENTS.

The law specifies two educational requirements which must be met by a child in New York before he can procure an employment certificate. First he must secure a school record, and second he must pass a literacy test.

A school record, according to law, must "contain a statement certifying that the child has regularly attended the public schools or schools equivalent thereto, or parochial schools, for not less than 130 days during the 12 months next preceding his fourteenth birthday, or during the 12 months next preceding his application for such school record and is able to read and write simple sentences in the English language, and has received during such period instruction in reading, spelling, writing, English grammar and geography and is familiar with the fundamental operations of arithmetic up to and including fractions and has completed the work prescribed for

¹ Labor Law, secs. 61 and 76-a. For the text of these sections see pp. 119, 123.

the first six years of the public elementary school or school equivalent thereto or parochial school from which such school record is issued."¹

During the period of school attendance children must be given instruction in a public school or in some other place where reading, spelling, writing, arithmetic, English language, and geography are taught in English.² If a child is instructed elsewhere than at a public school, the law requires not only that the instruction shall "be at least substantially equivalent to the instruction given children of like age at the public school," but that the attendance shall be for at least as many hours a day and "no greater total amount of holidays or vacations shall be deducted from such attendance." Absences, moreover, may be allowed only upon the same excuses as would be permitted under "the general rules and practice" of the public schools.³

At the time of granting a certificate the issuing officer not only must see that the child has a school record properly filled out but must "sign and file in his office a statement that the child can read and legibly write simple sentences in the English language."⁴

SCHOOL RECORDS.

In cities of the first class the school record from a public school must be issued by the principal or chief executive officer of the school the child attended; in all other cities and school districts having a population of 5,000 or more and employing a superintendent of schools, by the superintendent; and in school districts having a smaller population, by the principal teacher of the school.⁵ The granting of school records by parochial schools is not supervised except in the smaller cities, where it is in a measure under the supervision of the superintendent of the public schools, who issues the records upon the recommendation of the principals of these schools.

The school record, according to the compulsory education law, must be issued to a child who "after due investigation and examination" is found entitled to one, and, according to the same section of the law, it must be issued "on demand to a child entitled thereto or to the board or commissioner of health."⁶ This latter provision occurs also in the labor law. All school records must give the date of birth and the residence of the child as shown on the records of the school, and also the name of his parent or guardian.⁷

¹ Labor Law, sec. 73. Education Law, sec. 630, subsec. 1, and Labor Law, sec. 165, contain practically the same provisions as Labor Law, sec. 73. For the text of these sections see pp. 123, 127, 124.

² Education Law, sec. 620. For the text of this section see p. 125.

³ Education Law, sec. 628. For the text of this section see p. 126.

⁴ Labor Law, sec. 71. For the text of this section see p. 120.

⁵ Education Law, sec. 630, subsec. 2. For the text of this section see p. 128.

⁶ Labor Law, secs. 73 and 165. For the text of these sections see pp. 123, 124.

INTERPRETATION OF GRADE REQUIREMENTS.

Considerable perplexity exists throughout the State regarding the proper interpretation of the phrase, added to the law in October, 1913, which reads: "* * * has completed the work prescribed for the first six years of the public elementary school or school equivalent thereto, or parochial school from which such school record is issued."

In New York City the department of health has ruled that unless the child has been promoted to the seventh grade he has not completed the first six years of the elementary school. The superintendent of schools has acquiesced in this ruling and in addition, in order to secure greater uniformity in educational standards, requires that every public-school candidate for a working paper who has not completed at least the first half of the seventh grade must be examined by the school authorities as to his educational fitness for a school record. On the record used by parochial schools is printed the simple statement that the child has completed the first six years of school.

In Buffalo, although the record shows completion only of the sixth grade, the issuing officer does not grant a certificate unless the child states that he has passed the examination into the seventh. But when a child has spent two years in any grade he is considered by the school authorities to have finished the work of that grade and is promoted even though he can not pass the examination. In Albany, Syracuse, and Tonawanda, also, two years spent in the sixth grade is equivalent to passing an examination into the seventh.

In Rochester the department of public instruction considers ability to be promoted into a grade as evidence of completion of the one preceding, and two years' time in a grade is not the equivalent of completion, though a child who has spent two years in one grade may be placed in the one next above to see whether he can do the work. Pupils, however, who have not passed the examination into the seventh grade are sometimes granted school records. In Utica, Little Falls, and Victory Mills children are not supposed to be granted school records until they can pass the examination for promotion into the seventh grade.

In Cohoes and Troy a child is not required to have spent more than one year in the sixth grade to be eligible for a school record.

EMPLOYMENT-CERTIFICATE CLASSES.

Special classes maintained solely to aid children to gain the essentials of a six years' course in school and thus to become eligible to receive employment certificates were found in some schools in New York City and in one school in Buffalo. Under the old law, which required an examination in certain subjects, such classes were common; in January, 1916, they were discontinued in New York City.

In some schools in New York City special classes, composed of foreign-born children 7 to 18 years of age, unable to speak English, are formed to give the children a better command of the language. As soon as possible, however, these children are transferred to regular classes and then promoted from grade to grade until they have completed the sixth-grade work, when they may be given employment certificates. At the time of this investigation at least one school still maintained a special class composed of employment-certificate candidates whenever enough backward children in the school at one time desired to go to work. What are called rapid advancement classes are also utilized for this purpose. In these classes only the branches usually considered essential are taught, and the work of three terms is done in two. These classes of any grade are theoretically made up of the bright, over-age pupils, mostly foreign born or from homes speaking foreign languages. In practice, however, a candidate for an employment certificate who may be backward in the second half of the regular sixth grade is sometimes put in one of these classes and drilled in the requisites for the special examination.

One of these rapid advancement classes, for example, in a school from which a great many children go to work, was composed in 1914 of about 25 boys, of whom 10 were candidates for employment certificates, 1 or 2 were high-grade defectives, and the others were over-age pupils who were above normal in mentality. Of the 10 candidates for employment certificates, 9 were foreign born and 1 was native born of foreign parentage; 9 were Hebrews, and 1 was an Italian; 8 were between 14 and 16 years of age, and 2 had become 16 since entering the class. The two latter boys were a little backward and had not taken the examination, but as it had not occurred to them that they could leave school until they had finished the sixth grade, and as the principal had not told them they were old enough to leave, the chances were they would stay till school closed. One boy was in the class because the proof of age he had presented had not been accepted, and he was waiting till the birth certificate for which he had written should arrive. He had passed the examination and was therefore not much interested in his studies. Two boys had failed in the last examination and were preparing for the next one. None of the boys had been in the class more than five weeks. The records of every boy, except one who had recently entered, were examined. Each boy had been in the second half of the sixth or the first half of the seventh grade; all the boys, with the exception of one or two recent immigrants, had spent at least a year in each previous grade; and those who had recently arrived in this country had skipped from the foreign class to a regular class in a few weeks. The branches in which extra drill was given were those required for the

special examination for employment certificates—arithmetic, English, writing, and grammar. In addition, history, geography, and phonics were added, the history and geography being combined to show the geography of historic places. Phonics was believed to be a particularly important study, and constant drill was maintained in all sorts of combinations of sounds. The 10 certificate candidates were drilled separately from the others in the class in all studies except penmanship.

Whether such help was given in a regular employment-certificate class or in a section of a rapid advancement class, its chief significance in New York City was that the child was being drilled in the essentials in order to pass the examination for an employment certificate.

In Buffalo a regular employment-certificate class, in which essentials only are taught, exists in one school in the Polish neighborhood, but instruction and special help are often given to individual children in other schools. Children from the first half of the fifth grade to the second half of the sixth are allowed to enter this class when the principal thinks that he can not persuade them to go through the regular grades and when the family seems to need their help. Children who are temporarily out of work are also put in this class. The discipline and requirements are particularly interesting. In the 12 months previous to receiving his school record the child must be present 130 whole days—half days are not added together to make whole days—though all these days need not have been spent in the employment-certificate class; and he must secure his birth certificate or other satisfactory evidence of age while in the class. At the end of each month he is given a test in every subject, and if his grade averages 90 per cent or above, and he has complied with the requirements of attendance and of age evidence, his name is put on the honor roll and he is granted a school record. At the end of the year a regular examination for completion of the second half of the sixth grade—not a special examination for this class—is given, and all those who pass, provided they have complied with the other requirements, are granted school records. An examination of records of children in this class showed that most of them were able to leave after a few months' time. Some children were put into this class, it was found, on the day they were 14 years of age; in some cases they were taken from the first half of the fifth grade and placed in the employment-certificate class without first being placed in the second half of the regular sixth grade as was done in New York City; yet it was probably more difficult to get out of this class than out of any class in New York City giving similar help. This class was recognized by the Buffalo department of education, but at the

issuing office of the department of health it was said that if a child stated he had been in this class he was not granted a certificate.

In Rochester, although children who can not fulfill regular requirements are "tried out" in other grades and special classes and are given assistance by teachers, no special classes exist for children desiring to go to work. And none of the smaller cities visited had such classes.

EXAMINATIONS FOR EMPLOYMENT CERTIFICATES.

The requirement that a child applying for an employment certificate who has attained only the first half of the seventh grade shall pass an examination before receiving a school record is a ruling of the superintendent of schools of New York City. No similar requirement exists in any other city visited. Justification for the requirement is found in the provision of the compulsory education law that the school record must be issued to an applicant when, after due investigation and examination, he shall be found entitled thereto. Examinations are held in each district every two weeks, at a school building designated by the district superintendent. The ruling requires that, though these examinations shall be conducted by the principal of the school where they are held, they shall be under the general direction of the district superintendent. The practice followed differs in the various schools. Often responsibility for conducting the examination is delegated by the principal to an assistant or to a teacher. Sometimes the lists of names and ratings of children are sent to the district superintendent, sometimes only the names, and sometimes no report whatever. Only rarely does he see the questions used.

The subjects to be included are: (a) The writing of a bill which includes some simple work in fractions, with multiplication and addition in the extensions; (b) the solving of three or four simple problems in business arithmetic; (c) a simple exercise in dictation; (d) oral reading from a Fourth Reader; and (e) the writing of an application for a position or some other form of letter writing.

The ruling regarding the scope of the examination was made when the requirement was completion of the first half of the fifth grade and when the law stated that the child must have a knowledge of certain branches. When the law was changed no change was made in this ruling. Consequently wide differences are found in the examinations given.¹ Some principals add other subjects. On the other hand, one examination omits the test in letter writing because, according to the principal, it is a fifth-grade, not a sixth-grade study; another test omits not only letter writing but the oral reading and the writing of a

¹ New York City Form 21, pp. 146, 147.

bill. One test is suited to a child who has just finished the sixth grade, another to a child in the first half of the fifth grade. These differences are due partly to the fact that the law does not require such an examination and the ruling does not state to what grade the examination shall be adapted. Needless to say, children taking examinations in the districts which give the fifth-grade test have high ratings and all pass, while in the districts giving a sixth-grade test, many children have low ratings and often have to try the examination several times.

CHILDREN'S RECORDS.

The pupils' record cards found in the office of the bureau of attendance of New York City furnished abundant material regarding the educational status of children leaving school to go to work, and were valuable for this study in so far as they showed the educational equipment with which a child may start to work or the protection with which the school surrounds the child before allowing him to work. A bureau of attendance record card covers a child's complete school history from the time he enters school until he leaves and shows such points as the dates of entrance and of promotions, the attendance, grades, standings, and conduct, for every half year of enrollment. Between three and four hundred of these cards were examined, the records being chosen from those of several schools in Manhattan Borough from which large numbers of children left school to go to work. Every child who received a school record was looked up in the files of the Manhattan issuing office to ascertain the lapse of time between the issuance of the school record and that of the certificate¹ and to see whether the grade on the record card corresponded to that on the school record presented at the certificate office.

An examination of these record cards showed the various methods by which children are enabled to comply with the technical requirements of the law. A child may be promoted rapidly when he nears the age of 14; he may be tried in special classes; the examination may be adapted to his ability; or his grades in the examination may be raised. The child whose record is shown² was put into a rapid advancement class at one time and into a special class at another. In the last year—the year before he became 14 years of age—he spent only two months in the second half of the sixth grade and was then promoted into the first half of the seventh grade. Another interesting record is that of a boy who had arrived recently from Austria. He was placed in a special class for foreign-born children and then tried in the first half of the seventh grade, where he stayed about a month before being put back into the foreigners' class. He left school before his sixteenth birthday and

¹ See pp. 103, 104.

² New York City Form 22, pp. 148, 149.

received a certificate. Another boy doing average work progressed through the grades of the public school up to the time of his promotion to the first half of the sixth grade, when he evidently became eager to go to work. He did not enter the second half of the regular sixth grade, but went directly into the rapid advancement class for that grade. The school record stated that he was in the first half of the seventh grade, but no results of the examination were shown. The certificate was issued March 4, 1914, and the boy was discharged from school March 9, 1914. Another child, who went directly from the second half of the fifth grade to the first half of the seventh grade, failed in her regular employment-certificate examination in April but in May presented herself for another special test, with a note from her principal in substance as follows: "My dear Miss ———: I am very anxious that ——— pass the examination to-day, as it is necessary that she go to work. She is rather a dull girl, and I hope you will do what you can for her. ———, Principal P. S. No.——." This girl, in a test adapted to completion of the second half of the fifth grade, failed in arithmetic, and received C in reading and spelling and B in dictation and letter writing. The examining teacher marked the child as failed, but the principal of the school in which the examination was held gave her passing marks. At the issuing office the school record showed: Arithmetic C, dictation B, English B, and reading B. Records were also found of children who had progressed regularly through school, or were hurried only just before leaving, who had failed in the special employment-certificate examination and yet had received certificates.

ATTENDANCE REQUIREMENTS.

The requirement that a child must have attended school regularly 130 days during the 12 months next preceding his fourteenth birthday or during the 12 months next preceding his application for a school record means that a child must have attended school all but about 30 school days of an ordinary nine-months session either during the year preceding his fourteenth birthday or during the year preceding the date of his application for a school record. In other words, he must have attended school regularly, allowing for absence due to illness, accident, and other ordinary causes of irregularity. Such attendance, however, need not necessarily have been in the New York City schools. A child from New Jersey, for example, who had attended the schools of that State the required length of time would be granted an employment certificate, provided, of course, he had finished the sixth grade and had met the other requirements. Though the law does not so state, it has been interpreted by the issuing office in New York City to mean that the child must apply for a certificate

as soon as he is given a school record. A group of 14-year old children, who at one time had complied with the grade and examination requirements in a certain New York City school, received school records and then by common agreement did not apply for certificates. The principal notified the department of health and asked that certificates be withheld. Several weeks later, when the children applied for certificates, they were refused on the ground that their period of attendance had not occurred "next preceding" the time of application for a certificate. The children were obliged to return to school to fulfill the requirement.

METHODS OF ISSUING SCHOOL RECORDS.

Wide differences exist in the advice given children with regard to going to work and in the methods of issuing school records. These differences are most evident in the first-class cities where each individual school principal determines the necessary procedure.

A recent survey by the Public Education Association¹ showed that in some New York City schools the principals believed that the matter of most importance in issuing a school record was to make sure that the parent was willing to have the child leave school, and often they took great pains to explain to the parent the significance of the change and attempted to persuade him to allow the child to remain in school. Before granting a record some principals caused a visit to be made to the home or required the parent to come to the school. One principal did not consult the parent at all, but was very careful to have the child secure proper evidence of age before going to the board of health. Still another principal took a personal interest in each child who presented himself for a school record and gave him a set of instructions designed to be helpful to him in going to work.

In another school the home of every child who had asked for a school record was visited, the parent interviewed, and an attempt made to find some way to keep the child in school. If it was decided that the child must go to work, instructions were given as to the necessary requirements of attendance, age, education, and physical fitness, and the child was taught, if necessary, to write a letter asking for a transcript of his birth certificate. The New York child-labor committee's pamphlet of information as to how to secure foreign birth certificates was used. The child was not granted a school record until he had brought a note consenting to his leaving school signed by his parent and had complied with all the educational requirements. He was therefore not delayed later at the issuing office.

One principal, on the other hand, stated that it was not the school's business to help the child obtain an employment certificate. He

¹ The description of procedure in New York City schools here given is based largely upon a report made by Miss P. K. Angell to the Public Education Association of New York City.

said he simply obeyed the laws and the rules to the letter, so that if any trouble arose about any child who left his school he would be able to defend himself. Another principal said she felt that her responsibility ended with reading the law to a child who applied for a school record.

In Buffalo, since January, 1915, principals of public schools, in response to requests from the vocational-guidance committee of the public schools, have required children who ask for school records to bring the written consent of their parents on a regular form on which the parent states the reasons for the child's going to work. Unless the parent signs this statement the child is not given a school record. Several parochial schools are cooperating in this movement. In some schools the principal also requires the parent's signature on the school record in the specified place before allowing the child to go to the issuing office, a procedure which later saves delay for the child.

Rochester children do not receive their school records until after they have met all requirements for certificates except the physical examination.

In the smaller cities the superintendent of schools rarely gives the child any instructions as to the legal requirements for obtaining an employment certificate. Sometimes, however, teachers or principals may give such instructions.

In Albany, Troy, and Little Falls a child is not granted a school record until he can prove to the superintendent of schools that he has already secured a promise of employment.

In New York City and Buffalo the records of children enrolled are kept in the individual schools; no central control is maintained over promotions; and when children receive records no central office is directly notified. In Rochester, on the other hand, duplicate records of the age, progress, and attendance of every child enrolled in the public schools are sent at the end of every semester to the office of the efficiency bureau. When a pupil leaves school for any cause his permanent record card is also sent. This card shows the child's ratings and attendance, as does the similar bureau of attendance card in New York City. In Troy, Little Falls, and Tonawanda the superintendent of schools has duplicate records of the grade, ratings, and attendance of every child enrolled in the public schools. These records are consulted when the child applies for a school record, so that the superintendent can ascertain for himself whether the child has complied with the educational requirements. In the other cities visited the superintendent, in countersigning the school record, accepts the statement of the principal.

In first-class cities the statements on school records issued by parochial schools are accepted as are those on records issued by the

public schools; and even in the second and third class cities, where careful supervision is generally maintained over the qualifications of public-school children, superintendents of schools accept the statements signed by executive officers of parochial schools.

LITERACY TEST.

As previously stated, the law provides that the officer issuing a certificate must examine the applicant and "after making such examination shall sign and file in his office a statement that the child can read and legibly write simple sentences in the English language."

In New York City a Third Reader is used for this test, and from this reader sentences are dictated for the child to write. No reading test is given. Up to January, 1915, however, different tests were in use in the various borough offices and in some no test was given. During 1915, 79 applicants in New York City were refused certificates because of inability to pass this test. In Buffalo a Fifth Reader is used. The child is instructed to open at any place and read, and is also asked to write any sentence he wishes. In Rochester, in case the child appears illiterate or can not speak English, a problem in fractions is given. Otherwise there is no test. In Albany a test in reading was formerly used, but at the time of this investigation had been discontinued. In no other city visited was any literacy test given, nor were the majority of issuing officers aware that the law required one.

EVENING AND CONTINUATION SCHOOL ATTENDANCE.

In first and second class cities only, evening-school attendance is required by law of boys who have not completed a grammar-school course. In these cities any boy between 14 and 16 years of age who has an employment certificate, but does not hold a school certificate showing that he has completed the course of study required for graduation from a public elementary school, must attend evening school for not less than 6 hours a week for a period of not less than 16 weeks a year.¹

As for continuation-school attendance, the law provides that "when the board of education in a city or district shall have established part-time and continuation schools or courses of instruction for the education of young persons between 14 and 16 years of age who are regularly employed in such city or district," the board may require the attendance of any child who has not completed a grammar-school course and does not hold a certificate of graduation, unless the child is receiving elsewhere instruction approved by the board of education as equivalent to that given in the continuation school. The

¹ Education Law, sec. 622, subsec. 1. For the text of this section see p. 125.

required attendance must be from 4 to 8 hours a week for 36 weeks a year, and must be between 8 o'clock in the morning and 5 in the afternoon. Children attending part-time or continuation schools are exempt from evening-school attendance.¹

To all children who attend evening, part-time, or continuation schools as required, certificates of attendance must be given by the school authorities at least once a month and at the close of the term.² The employers of children subject to compulsory school attendance are required to keep and to "display" in the place where the children are employed these evening, part-time, or continuation school certificates.³ A penalty of \$20 to \$50 for the first offense and \$50 to \$200 for a subsequent offense is provided for failure on the part of the employer to have such certificates on file.⁴

Such is the law. In practice, evening-school attendance is enforced in some cities and not in others; in no place has part-time or continuation school attendance been made compulsory; and evening-school attendance certificates are issued in only a few places in the State and are rarely if ever demanded by inspectors or attendance officers.

In New York City evening-school attendance is believed to be a hardship for a child who works all day, and consequently no serious attempt is made by attendance officers to enforce the provision. At the time of this investigation instructions as to the requirement, however, were given to boys when they received their certificates at the issuing office. Recently a statement to the effect that attendance is required has been stamped on the certificates granted to boys who should attend evening school. In the evening schools, moreover, manual training shops have been maintained at great expense per pupil, and extra activities of various kinds have been tried in order to attract pupils of all ages. Nevertheless, during the school year 1914-15 only 4,093 "compulsory education pupils" were enrolled, and the average attendance of these was only 2,032.⁵

The course of study for evening schools in New York City is prepared by principals and educational experts and is approved by the board of superintendents. High-school, trade-school, and elementary-school courses are offered. Special provision for the boy who is required to attend is made in the elementary-school course, which comprises the work of the second half of the sixth to the second half of the eighth grade of the elementary day schools. Spe-

¹ Education Law, sec. 622, subsecs. 2 and 3. For the text of this section see p. 126.

² Education Law, sec. 631. For the text of this section see p. 128.

³ Education Law, sec. 627. For the text of this section see p. 127.

⁴ Education Law, sec. 628. For the text of this section see p. 127.

⁵ New York City Department of Education: Seventeenth Annual Report of the City Superintendent of Schools; Report on Evening Schools for the Year Ended July 31, 1915, p. 82.

cial provision is also made for teaching English to foreigners. No fee is charged.

In Buffalo an effort is made to enforce evening-school attendance, not only of boys, but also of girls who hold employment certificates. One school in particular claimed to have no more difficulty with girls than with boys. But when parents refuse to send girls the cases are not followed up as are those of boys. At the first of each school year, individual evening schools try to interest children in their courses by sending out invitations to all those who were enrolled during the previous year. The courses offered are prescribed by the superintendent of schools and include English and business and vocational branches in addition to the academic course. An initial fee of 50 cents is required of all those enrolling, but if the student has attended regularly this fee is returned at the end of the school year. This requirement insures more regular attendance, and thus enables the school to do a higher grade of work than would otherwise be possible. The total enrollment of persons of all ages in the evening schools during the school year 1914-15 was 14,313. Of this number, 2,198 were working children.

In Rochester, as in New York City, the department of public instruction is not in sympathy with the requirement of evening-school attendance for employed children, and no attempt is made to enforce the law. Evening-school courses are offered, however, in English, stenography, citizenship, and along vocational lines. For enrollment in the elementary evening schools a fee of \$1 is charged, but this is returned at the close of the school year to those attending regularly. The number of pupils enrolled during the school year 1914-15 was 7,891, but of this number only 329 were children under 16 years of age.

In Albany, according to the superintendent of schools, evening-school attendance of all boys who hold employment certificates and have not finished the eighth grade is enforced. The superintendent states also that he attempts to make girls attend evening school, but that they are not followed up carefully. He makes an earnest effort to secure the cooperation of employers. A notice, for example, is mailed to them instructing them in the provisions of the compulsory education law and requesting the names of children employed.¹ Reports are also made to them of the progress and behavior of the boys they employ and of the failure of any such boys to attend regularly.² This system aids in keeping track of the children employed. The course of study is determined by the superintendent of schools, and the evening-school principal reports to him. The standard of instruction is similar to that of the day school, but is

¹ Albany Form 1, p. 164.

² Albany Form 2, p. 164.

somewhat simplified. Business and technical courses are offered in the evening high school, and in the evening grammar schools the same courses are given as in the day schools, including special instruction in English to foreigners. Vocational courses were added during the school year 1914-15, but these are not open to children under 16 nor to children without the equivalent of eight years' elementary-school education. No fee is charged for attendance at evening grammar schools, but a fee of \$1 is required for the high-school or vocational courses. This fee is later returned to the child if attendance has been fairly satisfactory.

At Troy evening-school attendance is enforced in the same way as is day-school attendance, and the standard of instruction is set by the superintendent of schools. But in neither Syracuse nor Utica has any serious attempt been made to enforce evening-school attendance, which is felt to be a hardship to a child working during the day. The superintendents prescribe the course of study to be followed, but no well-defined course is offered for a child under 16 years of age.

A few attempts at continuation-school instruction have been made in the first-class cities, but attendance has been voluntary and none of the classes conforms to the requirements of the law pertaining to continuation schools. In New York City part-time classes for children between 14 and 16 years of age exist in a few establishments. Instruction is under the auspices of the board of education, and, while employed in these particular establishments, children are required by their employers to attend. In Buffalo a continuation school for printers' apprentices under 16 years of age was established in 1912-13. Attendance is voluntary and, though the cooperation of employers was obtained at first, the school has not been a continued success. In Rochester a continuation class has existed since September, 1914, for girls between 14 and 16 years of age who are employed in one department of a certain button-making establishment. These girls, who are required by the firm to attend forenoons every other week while employed, receive general instruction in academic subjects and, when first employed, specific instruction in the work required at the factory. In September, 1915, a continuation class in salesmanship was formed of girls employed in department and specialty stores. This class meets in the forenoon 4 days a week and the term is 12 weeks. Trade schools and vocational classes which cooperate with employers exist not only in all the first-class cities but in other cities throughout the State.

ENFORCEMENT.

The laws providing that children under 14 years of age shall not be employed and that children between 14 and 16 years of age shall have employment certificates when at work and shall attend school

when not at work are enforced principally by two sets of officials—local school authorities, who are mainly interested in keeping children in school; and inspectors of the State industrial commission, who are solely interested in seeing that children do not work illegally. Between these two authorities are interposed the officials of local health departments, who open the gates of industry to children and upon whose cooperation the other two agencies are largely dependent in their work.

The functions of local school authorities in enforcing school attendance are usually divided into three parts, the work of school principals and teachers, that of attendance officers, and that of school-census enumerators. As the appointment of one or more attendance officers is mandatory for every city, school district, and township in the State,¹ school principals and teachers rarely have any duties beyond keeping accurate records and making reports of attendance. Teachers in all schools, however, private as well as public, are required by law to keep accurate daily records of the attendance of all children under 16 years of age, and these records may be inspected or copied at any time by attendance officers or by other persons "duly authorized by the school authorities of the city or district." Any teacher, moreover, who does not "fully answer all inquiries lawfully made by such authorities, inspectors, or other persons," is guilty of a misdemeanor and liable to a fine of not more than \$500 or to imprisonment for not more than one year, or both.²

The duties of attendance officers relate, not only to children already enrolled in school who may drop out before they have passed the compulsory school age, but to any child in the community, enrolled or not enrolled, who is under 16 and is illegally absent from school. In order that attendance officers may be enabled properly to enforce school attendance they are given legal authority to enter, during business hours, factories and mercantile or other establishments and to examine the employment certificates and registers of children employed in such establishments.³ They may arrest truants without warrant and deliver them over either to the teacher or, in case of habitual and incorrigible truants, to a police magistrate for commitment to a truant school. A report of the disposition of each child must be made to the school authorities. Anyone who interferes with an attendance officer in the discharge of his duties, or any employer who refuses to show him the register or employment certificates of children in his employ, is guilty of a misdemeanor and liable to a fine of not more than \$500 or to imprisonment for not more than one year, or both.⁴

¹ Education Law, sec. 632. For the text of this section see p. 128.

² Education Law, sec. 629; Penal Law, sec. 1937. For the text of these sections see pp. 127, 131.

³ Education Law, sec. 633, subsec. 3. For the text of this section see p. 128.

⁴ Education Law, sec. 634; Penal Law, sec. 1937. For the text of these sections see pp. 128, 131.

Attendance officers are mainly relied upon to locate children not enrolled in school, and inspectors of the State industrial commission are depended upon to see that children are not illegally employed. The law provides, indeed, that attendance officers *may* visit places of employment, but that agents of the industrial commission *must* do so.

Inspection for violation of the minimum-age and employment-certificate laws in factories throughout the State and in mercantile and other establishments in first and second class cities is, in fact, the duty of the industrial commission. "As often as practicable" factories must be visited by inspectors of the division of factory inspection,¹ and mercantile and other establishments in first and second class cities by inspectors of the division of mercantile inspection.²

In cities other than those of the first or second class but having 3,000 or more inhabitants the boards or departments of health or health commissioners are charged with the duty of enforcing the law relating to mercantile and other establishments. In these cities, however, the law does not provide that there "shall" be inspection but merely that there "may" be inspection.³

In all factories where women or children are employed and in mercantile establishments in first and second class cities where three or more women or children are employed a copy or abstract of the law relating to their employment must be posted on each floor.⁴

Inspectors and other officers charged with the duty of enforcement have authority to enter, at reasonable hours, any establishment mentioned in the law to look for children and to demand the production of employment certificates, together with a register of names, ages, birthplaces, and addresses of all children under 16.⁵ All persons connected with these establishments must give the information demanded by an inspector; and no one may interfere with or obstruct an inspector in the performance of his duties.⁶

Penalties for violation of the child-labor law fall directly upon the employer, but for failure to send a child to school the parent is liable to a fine not exceeding \$5 or 5 days' imprisonment for a first offense and to a fine not exceeding \$50 or 30 days' imprisonment, or both, for a subsequent offense.⁷ For failure on the part of the employer to have on file an employment certificate, or for any violation of the labor law for which no other penalty is imposed, a general penalty is provided

¹ Labor Law, sec. 56. For the text of this section see p. 118.

² Labor Law, sec. 59. For the text of this section see p. 119.

³ Labor Law, sec. 172. For the text of this section see p. 124.

⁴ Labor Law, secs. 99a and 173. For the text of the latter section see p. 125.

⁵ Labor Law, secs. 56, 59, 76, 167, and 172. For the text of these sections see pp. 118, 119, 122, 124.

⁶ Labor Law, secs. 43, subsec. 2, and 172. For the text of these sections see pp. 117, 124.

⁷ Education Law, sec. 625. For the text of this section see p. 126.

ranging from a fine of \$20 to \$50 for a first offense to one of \$250 and 60 days' imprisonment for a third offense.¹ For failure to have on file the employment or school-record certificate required by the education law the employer is liable to a fine of from \$20 to \$50 for a first offense and from \$50 to \$200 for each subsequent offense.² For the employment of children under the minimum age the penalties are the same as for the employment of children without certificates.

SCHOOL ATTENDANCE.

New York City.—Two principal methods of enforcing school attendance are used, the first consisting of reports of absences sent by the principals of schools to the bureau of attendance, and the second consisting of reports from all other sources. The first method obviously affects only children who are already enrolled in a city school. The second method affects all children of compulsory school age, whether or not they have ever been enrolled in any school in New York City.

All children between 7 and 16 years of age who are absent from public school, unless the absence is excused or known to be legal, are reported by the principal, on the third day of absence, to the district supervisor of the bureau of attendance. If the child is known to be a truant, the principal must report the absence on the first day it occurs, and if he thinks best he may report any absence on the first day. The report of the child's absence is made on a quadruplicate form, one copy of which is kept by the principal; the others are sent to the district supervisor of the bureau of attendance. The attendance officer investigates, and if he finds the absence illegal returns the child to school as soon as possible. Even when he finds the absence legal he may reinvestigate if the child does not later return to school. In either case he reports to the main office of the bureau of attendance, where one copy of his report is filed. Two copies of this report are sent back to the principal, who keeps one as a record of the disposition of the case and returns the other to the bureau as a receipt. After 20 days of absence the principal either is directed to discharge the child or is notified that the case is being handled as a violation of the compulsory education law. A child who is so seriously ill that he can not return to school within three months may be discharged, upon a physician's certificate, to a "general suspense register"; but full particulars must be sent to the main office of the bureau of attendance. In case a child who is absent can not be located, the principal may apply, after 10 days, for permission to discharge him—pending further investigation—to the "general suspense register."

When a pupil transfers from one public school to another, he is given his permanent record card and a notice of transfer. The prin-

¹ Penal Law, sec. 1275. For the text of this section see p. 121.

² Education Law, sec. 628. For the text of this section see p. 127.

principal retains one copy of the notice and mails another copy to the main office of the bureau of attendance. The pupil presents his notice to the principal of the school he is entering, and the principal in turn notifies the bureau of the child's admission. The bureau then notifies the principal of the first school, and the child is discharged. But if at the end of 7 days no report has been received from the second school, the bureau investigates; and if at the end of 10 days the first school has not been notified of the child's admission to the other school, the bureau may direct the principal to discharge the child; or, if it fails to do so, the principal may discharge him and notify the bureau. The bureau continues its investigation of any case not definitely settled, even though the school has discharged the child.

The forms used by the bureau for reporting absences and transfers are distributed among all schools, parochial and private as well as public, and, though all parochial and private schools do not avail themselves of the services of the bureau in every case of absence, cooperation is said to be maintained with many of them. Pupils admitted to a public school from schools not cooperating are reported to the bureau as though from another city.

The school census, which later is described in full, is the principal method of detecting children of compulsory school age who have never been enrolled in any school in New York City. Cases of truancy discovered by census enumerators or school attendance officers, and any such cases which may be reported from outside sources, are handled exactly as are those reported by schools.

Beginning in an experimental district, the cooperation of the police department has been secured in enforcing school attendance. When a patrolman finds a child illegally on the street during school hours he takes him to the nearest school, delivers him to the principal, and receives a signed receipt.¹ If the child is not a pupil of the school to which he is returned, the principal notifies the district supervisor to send an attendance officer to take charge of him. A child who is excused from attendance because of physical illness or mental defect is furnished with an identification card to show attendance officers and patrolmen that he need not be returned to school. The child with an employment certificate, however, is not given an identification card, as he must be either at work or at school and therefore is not legitimately absent from school when not employed.

If a child in this experimental district is reported absent three times, even if found to be legally absent each time, he may be summoned with his parents for a hearing before the division supervisor; but this summons is not always issued, as in certain cases it may

¹ New York City Form 23, p. 150.

appear that more patience should be used. These hearings are intended in general to aid in maintaining personal interest between the parents and children and the school authorities; to serve as a basis for administering relief in the way of clothing, if necessary; to ascertain whether or not the child should be committed to an institution or whether special treatment is needed; and to prevent, if possible, a court record against the child. During the hearing the details of the case are thoroughly canvassed and the parent is asked if he is willing to have the child, in case of further absence, committed to an institution. If so, the parent signs a statement consenting to commitment, and the child is paroled to the attendance officer, is transferred to another school, and, in case the offense is repeated, is sent to an institution. If the parent is not willing, the child is paroled as in the previous case, but if he is absent again the case is taken before the court of domestic relations as one of parental neglect. There the child may be once more paroled. But if the case is not disposed of at this court, or if necessary later, the child may be taken to the children's court, by which he may be committed to an institution.

Buffalo.—In Buffalo the enforcement of school attendance is divided between the permanent census board and the department of compulsory education. The individual principal devises his own means of reporting absentees and reports from time to time to the attendance officer assigned to his district. In some instances, by sending out postal-card notices, he attempts to interest parents in the regular attendance of their children. In the congested districts of the city the attendance officers call at the schools daily. As in New York City, all transfers between public schools are supposed to be reported to the permanent census board. And if within a reasonable time a return notice does not come from the school which the child is to enter, an employee of that board telephones to ascertain whether or not he is there. If not, the case is referred to the compulsory education department. All schools do not report transfers, and sometimes it is not known that a transfer has occurred until a notice comes in from the second school. No record of attendance or progress of children exists in any central office either while they are in school or after they leave.

Rochester.—In Rochester the permanent census board and the efficiency bureau jointly enforce school attendance. Cases of unexcused absence or of absence suspected by the principal of a public school to be illegal are reported daily by telephone to the permanent census board. This office reports these cases by telephone to the proper attendance officers, who investigate them. In addition, principals often notify attendance officers directly of absences.

When a child transfers from one public school to another, or from a public to a parochial school, the school he is leaving mails a transfer card to the school he is to enter, and the latter, if a public school, notifies the efficiency bureau whether or not the child appears. If he does not appear, or if the parochial school does not report, the bureau directs an attendance officer to follow him up. A further aid in keeping track of children in the public schools is the weekly roll call in each school for changes of address.

When for any reason a child leaves school, his permanent record card is sent to the efficiency bureau. If the cause is unknown, principals are instructed to report the case to the attendance officer and not to return the permanent record card marked "Cause unknown" until the officer's report has been made. The bureau can easily check up such cases to see whether the attendance officer has been notified. Thus the names of children who have left school on a school record, who have moved out of the city or to a new address, who have become 16 years of age and left school, or who have left for any other reason, are all reported to the office of the efficiency bureau. At the end of every semester the attendance and progress of every child enrolled in the system who has left is checked up with the permanent record card, and cases which have not been reported by schools during the year are then discovered.

The reports of work of the attendance officers, who follow up also the attendance of parochial school children, are filed in the office of the efficiency bureau.

Second-class cities.—Of the second-class cities, Albany and Troy have systems of daily reports by telephone of unexcused or illegal absences, which are followed up by attendance officers. In Utica absences are reported to the attendance officer during his regular rounds, but special calls are telephoned to him at the office of the superintendent of schools. In Syracuse, according to the attendance rules, "the principals of the several schools shall, within 24 hours, notify the attendance officers, in writing, regarding all unexcused absentees." Such reports may also be telephoned to the attendance officers each morning or at noon, when they are at the superintendent's office. But the rules allow a child to be out of school one day, and if he returns the morning after being absent he need not be reported. One principal said that she did not wait—as the rules prescribe—until the second morning to send this written report, but twice a day sent to the attendance officer a note containing the names of absentees from each session. Parochial schools sometimes cooperate in reporting absences, but generally do not.

A system of checking up transfers between public schools, but not between parochial schools or between public and parochial schools, exists in all the second-class cities visited.

Third-class cities.—Daily reports by telephone and investigations of absences are made in Little Falls and Tonawanda, and when children transfer between public schools the superintendent's office is notified. At Cohoes the officer visits every school once a week, follows up all unexplained absences at that time, and also locates transferred children.

Villages.—In Victory Mills, the only village visited, the attendance officer follows up a child the first day he is absent.

SCHOOL CENSUS.

The duty of taking the school census, as has been seen, devolves in New York City on the bureau of attendance, in Rochester and Buffalo upon permanent census boards, and in the other cities, towns, and villages upon the local authorities in charge of the schools. Any parent or other person having charge of a child is liable to a fine of not more than \$20 or to imprisonment not exceeding 30 days for withholding or refusing to give information or for giving false information.¹ In Buffalo and Rochester the plan of census enumeration provided by law is based upon a census taken by the police commissioners under the regulations of the census board and constantly amended by information to be reported by parents directly to the police stations. In these cities it is the duty of persons in parental relation to children between 4 and 18 years of age to report certain facts in regard to such children "at the police station house of the precinct within which they severally reside." Thus removals from one police precinct to another or from one school to another, new arrivals in the city, the fact that a child is shortly to become of compulsory school age, and the fact that a child has gone to work, must all be reported to the police and by them to the school authorities.²

The results of a school census have no relation in New York, as in some States, to the distribution of State school moneys, which is based on the number of duly licensed teachers.

Outside of first-class cities.—While a permanent census board may be established in any city in New York State, no city not of the first class has such a board. The law provides that if a board does not exist, then, in October of every fourth year beginning in 1909 the school authorities of every city of the second and third classes shall take a census of all children between 4 and 18 years of age, including information in regard to the employment and school attendance of children similar to that gathered in the cities maintaining a permanent census board.³ Although this census is used to check the

¹ Education Law, sec. 653. For the text of this section see p. 130.

² Education Law, sec. 650. For the text of this section see p. 129.

³ Education Law, sec. 651. For the text of this section see p. 130.

school registration, it is taken so seldom that it is but little aid in the regular enforcement of attendance laws. In villages and school districts outside of cities the board of trustees is required to take annually, on the 30th of August, a census, including the same points, of children between 5 and 18 years of age.¹ A copy of this census is filed with the teachers in these districts, so that it may be checked with the registration.

Permanent census, New York City.—In New York City the census is taken by the attendance officers, who enumerate all children under 18, including even those under 4 years of age.

The census is taken by blocks; a family card is used for facts as to each child's physical condition, literacy, school attended and grade attained.² No index or individual identification card is kept. If the child is employed, the employment certificate number is taken and a note is made of the last school attended. Information regarding positions is taken on an individual schedule³ but, as it is frequently obtained from the parent, may not always be accurate. If a parent does not know where a child is working, a postal is left to be filled in and mailed to the board or given to the enumerator at another time.

In the course of enumeration children are frequently found who need special attention but might not otherwise be located. Their names are all recorded on the daily reports of the officers⁴ and are later reported to the departments or agencies responsible for their care. Children found illegally absent from school are reported to the district supervisor of the bureau of attendance and are dealt with like other truants. Among such children are those staying at home either with or without employment certificates, boys working during the day and not attending evening school, and foreign-born children who have never been enrolled in any school.

Policemen have been cooperating in the census, experimentally at least, by reporting to the bureau of attendance changes of address of families in their precincts.⁵

Permanent census, Buffalo.—In Buffalo no enumerators are employed regularly in the field taking the census, but whenever it is taken 60 policemen are transferred from their regular beats and work, until the city has been canvassed, under the direction of the secretary of the permanent census board. Three regular canvasses were made from 1909 to 1914. The census is taken by blocks, as in New York City, and a special census card⁶ is used. This card calls for information as to birthplace, date of birth, school attended, employment and literacy of the child, and nativity of the parents.

¹ Education Law, sec. 652. For the text of this section see p. 130.

² New York City Form 24, p. 151.

³ New York City Form 25, p. 152.

⁴ New York City Form 26, p. 153.

⁵ New York City Form 27, p. 154.

⁶ Buffalo Form 5, p. 160.

All this information for each child is transcribed to a regular record card.¹ The cards are filed by school districts or under the names of private schools, the records of children 4 to 6 years of age being kept separate from those of children 7 to 18 years of age. Moreover, to aid in locating the child's record card, an identification card, which indicates the school district or private school, is also made out for each child.

A complete list of children registered is sent in once a year from all schools, and new names are sent in as they are registered. Parochial schools, it is claimed, report more promptly and fully than public schools, and the dates on registration lists and transfers on file in the office bear out this statement.

No constant canvass is maintained during the year, but the 632 policemen of the city are expected to report the names and addresses of all families moving into their respective districts. In addition, the moving-van companies are asked to report the names and addresses of families moved by them, and are furnished with blank forms² for this purpose. Cooperation along this line has been fairly successful.

During the regular canvass a child found staying at home or working illegally is reported on a truancy card³ to the chief of compulsory education, and a duplicate record of each case is kept in the office of the permanent census board. When such a child is located the card is returned with a notation showing the disposition of the case. No limit is placed on the time for reporting each child, as it often takes weeks or months to force him back into school. The chief of compulsory education believes that the important thing is to locate and deal with the child rather than to make a report to the census board which will make its records complete.

The secretary of the permanent census board sends a monthly report of its work to the board and to the chief of the State attendance division at Albany. This report covers such points as number of changes of address, new registrations, new arrivals in the city, and sources of information.

The office files of the census board are used to some extent by inspectors of the department of labor or officers of other agencies for locating and proving the ages of children.

Permanent census, Rochester.—In Rochester six policemen are engaged continually in taking the census of children 4 to 18 years of age. The census is taken by streets; and the individual card⁴ requires information as to birthplace of parents and child, date of birth, proof of age, employment, physical condition, school, and grade, and on the back of it is kept a record of the employment

¹ Buffalo Form 6, p. 160.

² Buffalo Form 7, p. 160.

³ Buffalo Form 8, p. 161.

⁴ Rochester Form 2, p. 162.

if the child is at work. For every child whose name appears on an original card an index or identification card, which is an exact copy of the original card, is made out. The addresses of children on these cards are kept constantly up to date.

When a child is found staying at home illegally or working without a certificate the memorandum of such fact is transferred from the original record card to another form,¹ one copy of which is kept in the office of the board, while the other two are sent to the attendance officer, factory inspector, mercantile inspector, or whoever should take charge of the case. When the officer has disposed of the case he reports back to the office of the board on one of the slips. This slip is filed and a duplicate record of each case is also kept by the secretary of the permanent census board.

Often a parent can not tell where a child is working or what his occupation is. In such a case a sheet of instructions and a postal card are left at the house by the police officer or mailed to the parent from the office. The postal card is to be filled in by the parent or child and mailed to the office, where the information is copied on the original record card.

Each year the census board copies, from the records of the efficiency bureau, complete lists of children registered in the schools, and, from time to time during the year, adds the new names which have been registered. The enrollment lists sent in from the public schools are complete and accurate, but often the parochial-school lists are not.

Twice a week the census board has the transfers occurring in the public-school system copied from the records of the efficiency bureau and the information secured added to the original record cards. The address given on the transfer card is noted on the original record card, but the old address is not changed permanently until a policeman has found that the family is actually living at the new place.

Reports concerning new families sometimes come to the office from other sources than police officers. The name and address of any such family are listed on a special form and given to the proper police officer when he canvasses the street on which the family is reported to live. When a family concerning whom there is no record in the office of the board is reported to have children, the police make a special call to inquire. If such a family is reported to be moving, the police go both to the new and to the old address.

A daily report in duplicate is required of each police officer, one copy of which goes to the captain of the precinct and the other to the chief of police. A report on each street is also made as soon as the canvass of the street is finished. The information on these last reports is transferred to a regular form for a monthly report for the entire city.

¹ Rochester Form 3, p. 163.

These monthly reports, and also the reports concerning transfers and new registrations copied from the records of the efficiency bureau, are used in the monthly report which the secretary sends to the permanent census board and to the chief of the State attendance division at Albany.

The board constantly receives from agencies and persons interested in children requests for information regarding specific children. A record is kept of all such information given.

IMMIGRANT CHILDREN.

The industrial commission is required by law to procure, with the consent of the Federal authorities, complete lists of the names, ages, and destinations within the State of New York of all "alien" children of school age and to furnish copies of these lists to the school authorities in the localities to which the children are destined, in order to aid them in enforcing the compulsory school-attendance law.¹

In actual practice the United States Immigration Office at Ellis Island at irregular intervals sends to the school authorities throughout the State the names, ages, nationalities, and intended addresses of children of school age arriving from foreign countries. In New York City, even though these reports come frequently to the bureau of attendance, the enumerators often find it impossible to locate the families because the addresses given do not exist, or are incorrect, or merely temporary, as families may stay only a few days in the city on their way to another part of the country.

A child who comes to this country without his parents is admitted only if some responsible person signs a bond to take care of him until he is 16 years of age. These "bonded" children are more easily located than ordinary immigrant children, as they are not allowed to work but are obliged to attend day school until they are 16 and reports of their attendance must be sent every three months to the New York office of the United States Immigration Service. The bond states that the signer shall make this report, but in New York City the permanent census board ascertains these facts and reports regularly to the United States immigration authorities.

Bonded children obviously can not so easily escape the census board's enumeration as can those who arrive with parents or relatives, and who, if they claim to be 16, can easily enter industry and may never be found by the enumerator. The only hope of placing such a child in school would be that the industrial inspector might by chance discover him in the course of an inspection and challenge his age.

In Buffalo lists of immigrant children are sent to the compulsory-education department and in Rochester to the permanent census

¹ Labor Law, sec. 153, subsec. 2. For the text of this section see p. 124.

board; but to these cities the lists are sent only occasionally when a considerable number of children have been recorded as bound for a single city, and owing to this delay the attendance officers frequently find it impossible to locate them. In the smaller cities such reports are sent from time to time to the superintendent of schools.

APPLICANTS FOR CERTIFICATES.

New York City.—Daily reports of all children who receive or are refused certificates are sent by the bureau of child hygiene to the bureau of attendance. The reports of those who are granted certificates are made out in triplicate and include the name, address, and date of birth of each child, the school attended, the grade, the date of issuance, and the certificate number.¹ One copy is sent to the bureau of attendance and the other two are filed. At the end of each month a set of these daily reports is mailed to the industrial commission, to be used for statistical purposes. When the bureau of attendance receives notice that a child has been granted an employment certificate it notifies² the school which he has attended to that effect, and the school, unless the child is to work only after school hours, may then take his name from the register. The principal, however, is required to report back to the bureau that its notice has been received and to give, if possible, the name and address of the employer. Fifteen days after a child has been reported as having obtained a certificate, unless meanwhile a notice has been received that he has reentered school, an attendance officer visits his home or the place where he is supposed to be employed to see whether or not he is at work. If not at work, the child is returned to school immediately, unless in the judgment of the officer he ought to be given more time to search for work. In the latter case the officer later revisits the home, and if upon repeated visits he finds that the child has not secured employment and refuses to attend school, the child and parent are summoned to a hearing where the details of the case are inquired into. After this hearing the child may be given additional time to search for work, or the officer may be instructed to return him to school immediately.³

Reports to the bureau of attendance of children who are refused certificates are made out in quadruplicate for each child, and include the name and address, the name of the parent, the date of birth of

¹ New York City Form 28, p. 154.

² New York City Form 29, p. 155.

³ A boy and his mother were summoned to a hearing because the boy could not obtain work and was not at school. The testimony showed that his attempts to get work had been fruitless. The boy was referred to a woman who promised to make every effort to secure him employment; the attendance officer was instructed to follow up the case and report again, and the boy and his parent were told that in a short time, unless he found employment, the boy must return to school.

the child, and the cause of refusal.¹ One of these is filed at the central office of the bureau of attendance; the others are sent to the proper district office. The district supervisor sends one of these three to the school which the child attends, files one, and gives the other to an attendance officer. After the attendance officer has investigated the case, his copy of the report is returned to the central office to be placed in a tabulation file. Children refused because of physical defects are followed up² both by the school nurse and by the attendance officer.

Within the division of employment certificates in New York City, under the supervision of the chief, a system of reports is maintained which tends to make the procedure uniform and the work of the offices comparable. Each borough keeps a daily record of cases handled, and at the end of each week summarizes these records in a weekly report³ to the chief of the division. These reports show the number of applications made and of certificates granted, refused, and pending, and a detailed classification of the reasons for refusal. From them the chief compiles on the same form a weekly report for the city, which he sends to the director of the bureau of child hygiene. A similar report of certificates granted, expired, and in force is sent at the end of each quarter from the borough offices through the chief of the division to the director of the bureau of child hygiene.

Buffalo.—When a principal grants a school record he is supposed to send a notification by postal card⁴ to the permanent census board. This notice, which gives the age of the child and the parent's name, is destroyed when the report is received from the department of health that the child has obtained a certificate. A clerk of the permanent census board goes to the issuing office daily for the names and addresses of all children granted or refused certificates. These cases are reported on regular blanks⁵ provided for that purpose. For children refused certificates, as for children found illegally absent from school, truancy cards are filled in and sent to the chief of compulsory education, and attendance officers follow up the cases. For those receiving certificates no reports are made to the chief of compulsory education, nor is the individual principal sent any notice whatever of children who have received or been refused certificates. At the office of the permanent census board the regular record cards of children who have received certificates are filed separately in a "labor-certificate" file and are easily located. If a postal-card notice of the issuance of a school record has come in and the child does not apply for a certificate

¹ New York City Form 30, p. 155.

² New York City Form 31, p. 155.

³ New York City Form 32, p. 156.

⁴ Buffalo Form 9, p. 161.

⁵ Buffalo Form 10, p. 161. The forms used for listing granted or refused certificates differ so slightly that only the former is shown.

within a reasonable time, the school is notified by telephone and the principal may ask the attendance officer to investigate the case.

Rochester.—Whenever a child is granted a school record a postal-card notification¹ is sent by the principal of the school to the efficiency bureau, and if the child intends to leave school to go to work his permanent record card is also sent. The bureau of health telephones to the efficiency bureau at irregular intervals—daily during the busy season and once or twice a week at other times—the names of all public-school children who have received employment certificates and the school each child attended. These names are checked up in the office of the efficiency bureau with the records sent from the schools, and after an interval of ten days or two weeks the names of children whose permanent record cards have been received and concerning whom no report has come from the health bureau are reported to attendance officers. The child who receives an employment certificate for work after school and on Saturdays is treated like any other child so far as attendance is concerned. The checking of the registers with the permanent record cards in the enforcement of school attendance already discussed is a further aid toward preventing public-school children from dropping out of school and working illegally. But the system does not provide for finding the parochial-school child who stays out of school after receiving a school record and does not apply for a certificate.

The name and address of every child who has been refused or has received a certificate are procured each week from the issuing office by an employee of the permanent census board. A child who has been refused a certificate is followed up by an attendance officer, and cards containing the names of all the children who have received certificates are filed separately in the office of the permanent census board and are used by the attendance officers from time to time to ascertain what children have certificates. Thus all children from public and parochial schools alike and all newcomers to the city who are refused or granted certificates are checked up.

At the beginning of each school year the attendance officers are given the names of all children who requested school records but did not call for them during vacation and have not reported at school. They are followed up to see that they return to school or secure employment certificates, and the disposition of these cases is reported to the efficiency bureau.

Second-class cities.—No reports are made by the bureaus of health to the school authorities in the second-class cities studied. Hence there is no way of knowing from that source which children have certificates and which have not. In all these cities, except Syracuse,

¹ Rochester Form 4, p. 163. This card is also used to report changes of address within a district.

superintendents keep lists of all children to whom they have granted school records. In Syracuse the individual principals issue the school records, and therefore the losses to the school system as a whole can not be checked up until each principal's report is sent in at the end of the year.

Third-class cities.—In the third-class cities included in this study no regular system of reporting is maintained between health officers and superintendents of schools, but it is said to be comparatively easy to discover children who are illegally employed. In Little Falls and Tonawanda separate files of children who have received school records are kept in the office of the superintendent of schools, so that such children can easily be located. And in Little Falls, when the health officer has temporarily or permanently refused a child a certificate, he informs the superintendent so that the child may be expected at school.

UNEMPLOYED CHILDREN.

Local attendance authorities are responsible for the attendance at school of a child who is not at work. Since he must be at school when not lawfully and regularly employed, it is evident that a child who has received an employment certificate but has not succeeded in getting a job or has lost his job must return to school. But no machinery is provided in any New York law for enforcing such a requirement, and since the certificate is issued to the individual child, is returned to him when he loses employment, and is regarded as his property, it is difficult to provide for his return to school when unemployed. Furthermore, the law does not require that the child must be promised employment before he receives a certificate. As a result, an unemployed child—except in small communities where it can readily be known that he is out of work—is generally on the streets or staying at home. Even if he is found by an attendance officer, the production of an employment certificate and the statement that he is searching for work will usually exempt him from school attendance.

When a child in New York City receives his certificate the bureau of attendance makes a serious attempt to see that he either goes to work or returns to school. But after the child has gone to work the bureau has no means of knowing whether he keeps his job or whether, having lost it, he remains idle or goes back to school.

In the fall of 1914 the bureau of attendance, in cooperation with the largest elementary school in New York City, started a continuation class for unemployed boys over 14 years of age. The class was advertised in the surrounding districts, and boys were invited to come. Attendance was voluntary, and during the first term 81 boys, ranging in age from 15 to 18 years, attended. Only a few of these boys, and only 3 out of about 80 enrolled during the second term,

were under 16 years of age. Instruction is given in academic and commercial subjects and shopwork. The boys are also advised as to suitable vocations, and some efforts are made at placement.

In Buffalo an attempt is made, through the vocational-guidance committee of the public schools, to follow up from time to time children who have applied for positions, to learn what they are doing; and at times children out of work are persuaded to return to school. In Albany it is the plan of the superintendent to ascertain, at the time of granting the school record, where the child is going to work. If the evening-school principal in his daily reports shows the absence of a boy who has received a school record, the attendance officer goes to the place where the child has said he was employed. If the boy is working without a certificate, he is returned to day school. If working legally, he is ordered to attend evening school; and if his absence continues, he is followed up in the same way as though attending day school. In Troy a similar plan is followed during the time evening schools are in session. Girls, after they have once received certificates, are not followed up in either Albany or Troy. Ordinarily, moreover, there seems to be no way in either of these cities of preventing boys from attending evening school and loafing during the day.

In none of the other cities visited is provision made for the unemployed child. In Utica and Syracuse a child who has received an employment certificate is no longer obliged to go to school, whether or not he goes to work, and no serious attempt is made to follow up children with certificates or to enforce evening-school attendance. One superintendent frankly stated that he regarded an employment certificate as a permit to leave school and the school's responsibility as ending with the issuance of the school record.

INDUSTRIAL INSPECTION.

The procedure adopted by inspectors of the industrial commission is similar for factories and for mercantile establishments. In a small establishment or one of ordinary size the inspector, before going through the workroom, secures the certificates at the office, compares them with the names on the register, and on his rounds tries to locate each child. In an exceptionally large establishment, where many children are employed, an inspector does not identify each child with a certificate, but merely tests a sufficient number to assure himself that it is not customary for children to work without certificates in that establishment. The certificates on file are stamped with the inspector's name and with the date. Some representative of the firm usually accompanies the inspector on his tour of an establishment.

Whenever during his rounds the inspector sees a child whom he suspects of being under 16, he has the child sign his name on the first line of one of the forms¹ which he carries in a book for that purpose, and then looks over the certificates to see whether he has one for that child. If he finds the certificate, he compares the child's signature on it with that in the inspection book and enters the other facts required, particularly questioning the child as to the time of beginning and of ending work. If he does not find the certificate, he asks the child his age and the date of his birth. When the answers to these questions indicate that the child is under 16, or when the inspector doubts their truth, he has the child proceed to work in his presence and secures—both from the child and from the employer—the name of the person immediately responsible for the child's employment. If the child is admittedly under 16, the inspector orders him to procure a certificate or, if he is under 14, to return to school, and orders the employer to discontinue his employment until he has brought a certificate.

If, however, the inspector is in doubt concerning the child's age, he may require the employer either to furnish within 10 days satisfactory evidence that the child is over 16 or to discharge him. A notice² requiring an employer to furnish evidence of age may be served personally or by mail. In practice some inspectors serve it directly upon the employer as soon as a suspected case is discovered. Others simply tell the employer that a certain child appears to be under 16 and that his age must be proved, and proceed to secure whatever evidence of age is available. In the former case the child must be discharged in 10 days if his age is not proved; and in the latter more time may be allowed to send for documentary evidence of age. The evidence of age required may be, according to law, the same as that required for the issuance of an employment certificate. The papers constituting this evidence are filed with the industrial commission, and any person guilty of making a materially false statement in such papers is liable to a fine of not more than \$500 or to imprisonment for not more than one year, or to both.³ Physicians' certificates of age are accepted, and examinations for such certificates may be given by two physicians of the department of health. According to law, if an employer fails to produce within 10 days satisfactory evidence of age and yet continues to employ the child, proof that the notice was given and that the evidence was not produced is prima facie evidence in any prosecution that the child is under 16 and is unlawfully employed.⁴ But if no formal notice has been given, the

¹ Form 3, p. 135.

² Form 4, p. 136.

³ Labor Law, secs. 76 and 167; Penal Law, sec. 1937. For the text of these sections see pp. 122, 124, 121.

⁴ Labor Law, secs. 76 and 167. For the text of these sections see pp. 122, 124.

child is allowed to work until his age is proved; and the employer incurs no additional risk of prosecution unless he continues to employ illegally a child who has been shown to be under 16 years of age.

When a child tells an inspector that he is working illegally or when a violation is discovered in any other way, unless the employer is a repeated offender, the case is generally not referred to counsel until after a subsequent visit. If, however, the violation concerns a child under 14 years of age, no leniency is shown and the case is sent at once to counsel. In bringing cases for prosecution the child's statement of his illegal employment is not used as a basis of evidence, but the individual inspector must see the child actually employed illegally.

The accompanying table shows data for several years concerning the inspection of mercantile establishments, in so far as children are concerned:

Inspections in mercantile establishments covered by section 161 of the Labor Law.^a

Year.	Number of inspections.	Number of children employed.				
		Total.	Legally.	Illegally.		
				Total.	Without certificates.	Under age.
1900.....	7,235	6,070	2,949	3,121	2,365	756
1910.....	5,236	4,832	2,461	2,371	1,690	711
1911.....	5,282	3,828	2,253	1,575	1,154	421
1912.....	8,395	4,925	2,823	2,102	1,346	756
1913.....	12,860	6,794	4,034	2,760	1,820	940
1914.....	24,808	7,494	4,887	2,607	1,761	846

^a Figures taken from the Annual Report of Commissioner of Labor, New York State, 1914, p. 86.

Although inspections for child labor alone are sometimes made, yet in a general inspection the detection of illegal child labor is but a small part of the inspector's duties. Inspection must also be made for hours of labor of women, safeguards on machinery, sanitation, and protection from fire.

Inspectors record, on a factory-inspection card¹ or a mercantile-inspection card, information concerning an establishment received during their tours of inspection. Violations of the child-labor law are recorded on a child-labor form,² and cases of employment during illegal hours are given on the reverse of the same form. Each day reports of the work of the previous day are sent to the main office. Factory inspectors in New York City report to the office in the city; those in other parts of the State to the Albany office; and all

¹ Form 5, p. 137. The factory inspection form and the mercantile inspection form differ so slightly that only the former is shown.

² Form 6, p. 138.

mercantile inspectors to the main office, in New York City. When cases of violation of the child-labor law in factories are to be referred to counsel, the child-labor violation cards are kept in the offices of the supervising inspectors in different parts of the State until the counsel's action on them is completed. They are then sent to the Albany office. All violation records of mercantile establishments are examined by the chief mercantile inspector, who decides whether the facts proved justify sending cases to counsel.

The accompanying table shows, for the year ended September 30, 1914, the number and results of prosecutions for violations of the labor law concerning children in factories and in mercantile establishments.

Number and results of prosecutions for violations of the Labor Law, year ended Sept. 30, 1914.¹

Place of employment, age of child, and cause of prosecution.	Number of cases.					Amount of fine.
	Total.	Pending.	Dis- missed, acquitted, or with- drawn.	Convicted.		
				Sentence sus- pended.	Fined.	
In factories:						
Under 14 years.....	37	1	19	14	3	90
From 14 to 16 years—						
a. Certificates.....	108	6	22	61	19	265
b. Hours.....	191	3	12	91	85	1,945
c. Prohibited occupations.....	7	1	1	4	1	20
In mercantile establishments, etc.:						
Under 14 years.....	216	10	10	161	35	770
From 14 to 16 years —						
a. Certificates.....	208	8	24	149	29	630
b. Hours.....	154	1	16	107	30	605

¹ Figures compiled from the Annual Report of Commissioner of Labor, New York State, 1914, pp. 73, 71, 74, 75, 96, and 97.

In the third-class cities visited no health officer, when this investigation was made, had ever inspected a mercantile establishment for woman and child labor. One officer stated frankly that it was impossible for him to find time for this work. Another stated that he had repeatedly called the attention of his board to this provision, but that it had not authorized him to inspect establishments. A third, who had been a health officer for 25 years, was not aware that such inspection was one of his duties.

CONCLUSION.

The exact application of the New York minimum-age and employment-certificate laws is so complex and technical a subject that its discussion has been placed in the appendix. But the evident intent of the law is that children shall not be employed until they are 14 years of age, except boys over 12 in the gathering of produce; and that employed children from 14 to 16 shall hold employment certificates, or in certain

occupations in the smaller cities school-record certificates. And in practice agriculture and domestic service are the only occupations in which any large number of children are employed under 14 years of age or under 16 without certificates.

That the law, however, accomplishes its intent by means of a complicated and in part overlapping series of provisions, applying to different places of employment and to cities and villages of different sizes, presents a problem which can be solved only by the bill drafter, not by the administrator. All labor laws should be so clear and simple that at least their main points can be readily understood, not only by lawyers but certainly by all persons who are charged with their administration, and, if possible, by all persons who must conform to their provisions. As is shown in the appendix ¹ the New York child-labor laws fail to meet this fundamental requirement of good labor legislation.

General administration.—The division of authority over the administration of the employment-certificate laws of New York State is unusual in three respects: First, New York is the only State in which health officers issue employment certificates; second, it is the only State in which health officers are given authority in certain cities and villages to inspect establishments for violations of the child-labor laws; third, it is the only State in which a State department of labor is given supervision both over the work of local health officers in issuing employment certificates and, so far as blank forms determine procedure, over the work of local school authorities in issuing school records to children. The unique feature of the New York system, indeed, is the prominent part played by local health officers.

The reasons for placing the burden of decision as to a child's fitness for work upon health officers rather than upon school authorities are stated to be, first, the need of having the issuing officers immediately accessible to the birth records; second, the fact that in the health department machinery and equipment for giving physical examinations already exist; third, the desire to avoid the feeling which might arise if any one set of school officials should issue certificates; and, fourth, the belief that the health officers act as a check upon school authorities who may wish to get rid of backward or disorderly children.

The present method is believed to insure a thorough physical examination and to evade the pressure brought to bear by parents upon teachers, principals, and superintendents to permit their children to go to work. It is believed that health officers, because generally not brought in such direct contact as school authorities with the children and their families, are better able to withstand the urgent entreaties of needy parents and to decide ultimately

¹ See p. 111.

whether or not a child shall be given an employment certificate. It is also believed that—at least in New York City, where the schools are overcrowded and the classes so large as to strain the teachers' powers to the utmost—school authorities may yield to the ever-present temptation to allow stupid or troublesome children to leave school for work even though they have not fulfilled the educational requirements of the law. And the fact that, in 1915, 79 children who brought school records showing completion of the sixth grade were refused certificates because unable to read from a Third Reader seems to prove this belief true.

The result of placing the responsibility of issuing certificates upon local boards of health is undoubtedly to emphasize the physical examination. So far, however, as the educational requirements are concerned, it is difficult to see that this division of responsibility creates any materially greater degree of protection for the child in certificate offices of New York State than in those of other States where the school authorities who issue certificates are permitted to give applicants an educational test. The health officer in New York State himself must certify to the child's age and physical condition. He must certify also that the child "can read and legibly write simple sentences in the English language." Because of this provision of law children are given an educational test in New York City and in Buffalo, but in no other of the certificate offices visited. Moreover, a child in the third grade might be able to "read and legibly write simple sentences in the English language," and the only evidence ever required that the child has completed the sixth grade is the school record, which is issued by the school authorities and which, if "properly filled out and signed," must be accepted without question by the agent of the board of health who issues certificates. In other words, though the health officers can refuse certificates to children who are totally unable to read and write simple sentences in English, they have no power to prevent children from going to work without having fulfilled the real educational standard set by the law—completion of the sixth grade. Moreover, even health officers may not be immune from political and personal pressure to permit children to go to work.

Conditions, possibly temporary in their nature, appear to have made necessary in New York this division of responsibility for the child's entrance into industry. There are, however, three objections to the system. The first and most important is that divided responsibility is likely to mean a weak sense of responsibility in both agencies. The second is that the complete removal of the child at this critical stage in his life from the jurisdiction of school authorities who have thus far been the greatest influence in his life outside the home is

very likely to widen the tremendous gap that separates his school from his working life. And the third is that, by taking from the school all responsibility over the child and thus causing it to lose interest in him as soon as he leaves its doors, this removal tends to make much more difficult the serious constructive problem of how best to bridge this gap between learning and doing—between school and a gainful occupation.

In deciding whether or not a child shall go to work little discretion is given to either school or health authorities. The school authorities must issue school records to all children who are qualified. They are, it is true, sole judges of whether or not a child has actually met the educational requirements of the law for a school record, and must issue a school record only after "due investigation and examination." But if a child has completed the sixth grade, and has attended school the requisite number of days, the school record must be issued, under a strict construction of the law, "on demand," regardless of whether or not the child intends to secure an employment certificate and go to work. In other words, though a child under 16 must go to school unless he is "regularly employed," the law makes it difficult for the school authorities to say that he shall be given a school record only after he has secured a promise of employment.

As for the discretion given to health officers to withhold certificates in individual cases, the law provides that a certificate "shall be issued" on application of the child's parent, but that it shall not be issued until the school record and legal evidence of age have been "received, examined, approved, and filed" and the child has been examined and has been found to be "in sound health" and "physically able to perform the work which it intends to do." Over the school record the issuing officer has no control whatever, except to see that it is "properly filled out and signed." As for evidence of age, he must accept birth certificates, certificates of graduation accompanied by school records, passports, or baptismal certificates unless he has reason to suspect their validity, but any other evidence of age not only must be valid but must be of a kind that he considers "satisfactory." In most cases he is allowed probably his greatest degree of discretion in determining whether a child's physical condition justifies him in granting a certificate.

Another weakness in the method of administration specified in the employment-certificate laws of New York lies in the fact that, except in factories, no uniform method of enforcement throughout the State is provided. Local school-attendance officers, it appears, must enforce not only the provisions of the education law relating to school attendance but also certain of those relating to employment and school-record certificates. The labor law is enforced in factories

throughout the State by factory inspectors and in mercantile and other establishments in first and second class cities by mercantile inspectors of the State department of labor. But outside of first and second class cities inspection for violations of the mercantile law is a power, not a duty, of local health officers, with no provision whatever for State supervision. For the inspection of mercantile and all nonfactory establishments in places of less than 3,000 inhabitants, moreover, no provision is made in the law.

The most serious defect in the administration of the New York child-labor laws, however, is probably the lack of supervision by any State agency adequate to insure uniformity in methods and standards. The State department of education has supervision over school attendance and over the educational requirements for a certificate. It prepares the form of school record to be used, and this form is approved by the State industrial commission. But as a matter of fact, when this investigation was made the school records used in 1 of the 6 second-class cities and in 6 of the 24 third-class cities from which reports were received differed in some important respect from the approved form.

The supervision over the issuing of employment certificates given by the law to the State industrial commission apparently might be made effective, but it has not been so in actual practice. Though since October, 1913, the department has had access to all records in issuing offices and has had authority to inquire into methods of issuing certificates, its reorganization in that year and again in 1915 when it was placed under the jurisdiction of the newly created industrial commission has tended seriously to delay the practical exercise of its powers of supervision. Even the reports of certificates issued and refused and the physical-examination blanks which the law states must be sent every month to the department of labor are sent by many offices irregularly; and when they do not come the department does nothing until the end of the year, when it notifies the health officer to send them. As for the power of the department of labor to require physical examinations of children at work and to revoke certificates on the basis of such examinations, this is rarely used.

Methods of securing certificates.—Owing to the complexity of the law and to the lack of State supervision, the procedure that the child is obliged to follow in order to obtain an employment certificate varies widely in different places. In some cases, as in the matter of the appearance of the parent in person and in the matter of the literacy test, these differences are due to ambiguities in the law which are differently interpreted by local officials. In other cases they seem to be due to failure rigidly to enforce plain requirements of the law.

The latter is true, as later discussed in detail,¹ of the character of evidence of age preferred or required to be brought by the child.

The number of trips and the length of time necessary to procure a certificate depend in large part on the city or village in which the child lives. Lack of information as to the requirements for securing a certificate frequently necessitates additional trips. Except in New York City and Rochester, no printed instructions are issued, though in other places the children in certain schools are sometimes told, particularly at the close of the school year, how to secure certificates. Sometimes, especially in the smaller places, the child is obliged to return for his physical examination because his first visit was not during the office hours of the examining physician. In Victory Mills practically every child must make at least three trips, two to the office of the clerk of the board of health and one to the health officer in Schuylerville, a mile away. Whenever the parent makes affidavit to the child's age elsewhere than at the issuing office, the child generally has to come first to the office for the blank affidavit form and to return later with it filled out. On the other hand, wherever the parent is always required to appear at the certificate office, as in New York City, Utica, and Little Falls, or always when required to make affidavit as in Troy, Syracuse, and Cohoes, this requirement is likely to result in additional trips for the child, as it is frequently not understood, particularly where the parent must appear in some cases but not in others. In Syracuse a child is obliged to make an additional trip by reason of the fact that he must obtain a school record blank at the issuing office to take to his school principal.

Delays in securing certificates may be occasioned by two other causes; first, difficulty in securing school records during vacations, and second, lack of a birth or baptismal certificate, a school diploma or a passport as evidence of age. Even in cities where the school superintendent issues school records—i. e., cities which have a population of 5,000 or over, other than first and second class cities—though his office is generally open the entire year, he can give children school records during vacations only if provision has been made by the various schools, public and private, for depositing with him the school records of all children who may wish to go to work during the vacation. In first and second class cities and in places of less than 5,000 population the difficulty is greater because the principals of schools who must issue school records usually have no office hours and frequently go away during vacations. To overcome this difficulty in New York City and Buffalo the children in many schools are told to secure their records before school closes if they wish to go to work during vacation. In Rochester a better plan is used. There the

¹ See p. 90.

records of children who think they may wish to go to work are made out except for the date and filed in the office of the efficiency bureau, where they can be procured at any time. This plan, however, does not apply to parochial-school children.

Delays due to efforts to secure the best possible evidence of age are a necessary safeguard to the child. Wherever the law is strictly interpreted and children born abroad or outside of the city in which they are applying are obliged to send for transcripts of their birth certificates, the issuing of the employment certificate is necessarily delayed for whatever length of time—sometimes a month or more if the letter must go to a foreign country—may be required to receive a reply. If a child in a first-class city is obliged to have a physicians' examination to prove his age, he must wait, as has been noted, 90 days.

A child who presents "other documentary evidence of age," moreover, is theoretically obliged to wait for its approval by the board of health. In some places a delay of as much as two weeks may be thus caused. In Rochester and Little Falls, however, "other documentary evidence of age" is accepted at once by the issuing officer. In Rochester the health bureau never acts upon such evidence, and in Little Falls a certificate would be revoked, it is said, if the board later declined to accept the evidence of age offered. But in neither city does the procedure seem to be in strict fulfillment of the law, which prescribes that the issuing officer—when satisfied that the applicant is over 14 and that he is unable to produce a birth or baptismal certificate, a passport, or a school diploma—shall present a statement of the facts, together with whatever other documentary evidence is available, to the board of health, and that at a regular meeting the board of health may by resolution provide that this evidence shall be received. In other words, the delay which the law requires in cases of this kind is eliminated in the procedure of the issuing offices in Rochester and Little Falls.

Delay in securing a certificate is not only an inconvenience to the child but not infrequently the cause of a break between his school life and his working life. When the child secures a school record and applies for an employment certificate he has decided to leave school; and, even when notice of delay in securing a certificate is sent to the school authorities, it is difficult to induce him to return. Attendance officers, moreover, knowing that he will soon leave school permanently, often do not think it worth while to make a great effort in his case. The plan followed in some schools of not giving a school record nor allowing a child to leave school until he has secured satisfactory evidence of age obviates a large part of this difficulty. This requirement, though not a provision of law, apparently could be made

general, for the child is not entitled to a school record unless he is 14 years old.

The requirement of a fee for a copy of a certificate to replace one which has been lost, as practiced in New York City and Buffalo, seems a hardship to the child who has actually lost the document, particularly as the employer can not be compelled to pay the fee, even when he himself has lost the certificate. The plan in use in Rochester of penalizing the child by making him wait a week unless he can bring a statement from the employer to the effect that he lost the certificate or that he wishes to employ the child at once is probably quite as effective and more just. In this connection it should be noted that additional protection against the misuse of duplicate certificates is provided by the method in use in New York City and Buffalo of having such certificates clearly labeled as duplicates. But the problem of duplicate certificates can not be completely solved so long as certificates are given to the children instead of directly to their employers.

The office procedure itself seems in some places to be unnecessarily complicated and confusing. In the Manhattan office, for example, the child frequently is obliged to be interviewed by as many as four people, and sometimes more, and often he is interviewed several times by the same person; the office is not so arranged as to make the order of these interviews clear and simple; the child does not reach the clerk who has power to accept or reject documents until the very end; he goes through all the rest of the procedure before the literacy test is given; and the forms, particularly different forms for transcribing various kinds of evidence of age, and the many stamps in use seem unnecessarily numerous and complicated. Even when the child brings all requisites, he and his parent may be in the office over an hour before the certificate is issued. The very fact that an average of 75 applicants present themselves daily at the Manhattan office shows the need for as simple and systematic a procedure as is consistent with absolute assurance that the legal requirements have been fulfilled in every case.

That in Buffalo the office procedure is simpler and better organized is due largely to the greater authority given the first interviewer, which results in clearing the office rapidly of all children except those waiting for the physical examination—the final step before the certificate is issued. The New York City and Buffalo offices were the only ones visited which in their procedure adhered strictly to the letter of the law.

In Rochester, though no one can justify failure to follow law, the children are handled in a dignified, orderly way, are made to feel the importance of the occasion, and are given more deliberate and

thorough instruction than is customary in other offices. Applicants usually appear with the requisites, owing, probably, to the efficiency of the school system as well as to that of the bureau of health. Moreover, the extralegal requirements are such that the statement is justified that children go to work as well equipped as from any office in the State.

In no issuing offices visited outside of those in first-class cities was there thorough familiarity with the requirements of the existing law. In Rochester the departures from legal requirements appear to be deliberate efforts to secure more practical protection for the child at less cost to him than is required by law. But outside the first-class cities no issuing officer seemed to be aware that a certificate of graduation is acceptable as evidence of age, that a parent's affidavit must accompany any evidence of age except a birth record, or that a parent's affidavit unaccompanied by any other evidence of age is not acceptable, and—except in Albany—it seems never to have occurred to any of the issuing officers that the law requires a literacy test to be given by the officer who issues a certificate. In fact, in the smaller cities practically no office visited was operating under the provisions of the present child-labor law.

Lack of adequate supervision by any State agency makes possible not only these wide differences in interpretation and even in knowledge of the law, but also many differences in the form and size of employment certificates. Though the actual requirements as well as the forms differ widely, an employment certificate made out in one part of the State is good anywhere else in the State. The law provides that the blank forms for certificates and school records shall be "approved" for first and second class cities and both prepared and furnished for all other places by the industrial commission. Yet 1 out of the 11 places visited during this investigation, and 2 out of 23 other places, used old forms which are not based on the model approved by the commission and do not conform to the present law. In some places only one copy of a certificate is made, a record of the essential facts being kept on a stub; in other places two copies are made, one for the child and one as an office record; and in still other places three copies are made, one for the child, one as an office record, and the third to send to the State department of labor as a report of the issuance of the certificate.

Evidence of age.—The law prescribes exactly what evidence of age shall be accepted and the order of preference of various documents. Yet of the issuing offices studied, only those in New York City and in Buffalo demanded the documents in the order prescribed by law; and the extralegal requirement in New York City that the parent's affidavit shall always be taken, regardless of the character of evidence

submitted, left Buffalo the only place where the exact legal procedure was followed.

The only offices visited where foreign-born children were always required to send for transcripts of birth certificates were those of New York City, Buffalo, and Tonawanda. In all the other offices baptismal records, passports, and other documents were frequently accepted when birth certificates could easily have been procured. In Rochester birth certificates, baptismal records, and passports appeared to be regarded as equally acceptable, but particular attention was paid to physiological age which the health officer considers of more importance than the exact date of birth. In Rochester, Albany, and Syracuse passports from countries where birth certificates were available were commonly accepted, and foreign-born children were only occasionally required to send for the preferred documents. In Troy, Utica, Cohoes, Little Falls, and Victory Mills no effort was made to have foreign-born children procure birth certificates.

In Cohoes, Little Falls, and Victory Mills, owing to the fact that the birth certificates are kept by clerks of the boards of health who have other and more pressing duties and consequently often find it impossible to consult the records when asked, birth certificates frequently are not required even of children whose births are registered in those places. Thus birth certificates as evidence of age are made practically unavailable for the very children for whose benefit in large part these communities maintain their systems of birth registration. The remedy lies, not in permitting fees for a search of the records in such cases, but in making it the legal duty of all registrars to examine their records upon the request of applicants for employment certificates.

In many places, even when a child is told to write to another city or to a foreign country for a transcript of his birth certificate, he is given no instructions as to whom to address or what fee to send; and only in New York City and Buffalo is evidence demanded that he actually has written. The methods used in both places, however, are open to objection. The registry receipt demanded in New York City proves that the child has written, but nothing prevents a child from concealing the receipt of a reply which might show him to be under age. On the other hand, the Buffalo method of compelling a child to wait until he can produce a certificate or a returned letter seems an undue hardship upon the child by placing him at the mercy of careless or indifferent officials.

At the time of inserting in the law the provision that a certificate of graduation should be preferred as evidence of age to a passport or baptismal certificate if the school record showed the child to be over 14 years of age, it was believed that this provision would furnish the

child with a special incentive to complete the elementary school course before going to work. Little evidence can be found, however, that this provision is of any practical value and, as the child's age does not appear on the diploma, it practically amounts to the acceptance of a school record as evidence of age in the case of grammar-school graduates. As a matter of fact the requirement of a school diploma as evidence of age in preference to a baptismal certificate, passport, or any other documentary evidence except a birth certificate, is unknown outside the three cities of the first class and is frequently used there in a way which appears not to have been intended. In Queens Borough, for example, a child born in New York City applied with a card showing his birth was not recorded, a baptismal record, and a school diploma. Instead of demanding a school record and accepting the diploma as evidence of age, in strict accordance with the law, the diploma was accepted as the school record and the baptismal record as evidence of age—a logical if not a legal procedure. Only thorough State supervision and instruction of issuing officers could make this provision of any practical value.

The examination for a physicians' certificate of age, as permitted in first-class cities, must necessarily show not only whether a child has probably reached a certain chronological age, but also whether he "has reached the normal development of a child of [his] age"—a requirement for all children regardless of the evidence of age furnished; and if physiological age could be determined by proper standards, it certainly would be a good supplementary measure of the child's fitness for work. But without such standards and without any method of correlating physiological and chronological age the physicians' certificate amounts simply to adding to a physical requirement which, if literally interpreted, is applicable to all children, a physician's guess as to the chronological age of the particular child who can not produce documentary evidence. It means, moreover, that a child who would not be allowed to go to work on the guess of one set of official physicians would have no difficulty in securing a certificate from a set in another office. The period, however, which must precede the granting of a physicians' certificate serves to make children and parents leave no stone unturned to secure some form of documentary evidence of age.

Parents' affidavits alone appear not to be acceptable under a strict interpretation of the law, but must accompany documentary evidence other than a birth certificate, school diploma, baptismal record, or passport. The parent's affidavit, moreover, is primarily an affidavit that better evidence of age than that offered can not be procured and is only secondarily an affidavit concerning the age of the child. As a matter of fact, the greatest confusion prevails as to when parents' affidavits are required and when not. In New York

City a parent's affidavit must accompany any evidence of age whatever. On the other hand, parents' affidavits unaccompanied by any other documentary evidence are constantly accepted in Albany, Troy, Utica, Syracuse, Cohoes, and Victory Mills. In Cohoes and Victory Mills, though baptismal records could be easily secured because most of the applicants are Catholics, they are not asked for, and parents' affidavits without supporting evidence are accepted as a matter of course.

Theoretically a child in other than a first-class city—where a physicians' certificate of age is acceptable—who has no documentary evidence of age can not secure an employment certificate. But practically the acceptance of parents' affidavits is so general that Tonawanda and Little Falls were the only places investigated outside of first-class cities where a child could not in actual practice secure a certificate without some other form of documentary evidence of age.

In general, because of lack of State supervision, children are going to work in New York State, in spite of excellent legal provisions, on the widest possible variety of evidence of age. The same child who, if he applied in New York City, would be required to produce either a birth certificate or proof that he could not secure one, in Cohoes would have to present merely an affidavit signed by his parent. If he came to any one of the New York City offices, his evidence of age would be stamped to show that it had been used, and he would be unable to pass it on for use by a younger child; but this would not be done anywhere else in the State. If he received his certificate in Buffalo or Rochester, the date of birth on it would be perforated to prevent effacement in an effort to appear over 16 and therefore not subject to the law regulating hours; but if he received it anywhere else in the State, the date of birth would simply be written.

An effort is now made in New York City to have a child bring satisfactory evidence of age when he first enters school. If this were generally done, the child would not have so much difficulty in proving his age when he wished to go to work. Such evidence is more easily secured when a child is young and less incentive to falsify age exists. There is, however, difficulty in the strict enforcement of such a regulation; for though under the compulsory education law a child may be debarred from leaving school, he could hardly be debarred from entering school because of lack of evidence of age. Nevertheless, in the great majority of cases the evidence of age can easily be produced when the child enters school, and a regulation of this kind would be a decided assistance in proving the child's age when he wished to go to work.

Physical requirements.—As in the matter of evidence of age, the lack of any centralized supervision over the physical requirements for an

employment certificate in New York State has led to a wide variety of standards for the child who is entering industry. Though the law requires that a child to be granted a certificate must be in "sound health," instead of in "sufficiently sound health," as in most States requiring a physician's certificate, the physical examination, except in Rochester, is given in so short a time that it is doubtful whether any but the most obvious defects are detected. The points to be covered in an examination are determined by the State industrial commission, but the instructions for giving the examination issued by the department of labor are totally inadequate to secure uniformity of standards as to the nature or degree of defect for which a certificate shall be refused. As a result children are allowed to go to work in one community with physical defects which in another would be considered serious enough to warrant refusal of a certificate. In practice the individual examining physician establishes his own standard of "sound health," and no uniformity in the physical condition of working children is maintained in the State.

In New York City the department of health has attempted to establish tentative minimum standards of height and weight which an applicant must attain before he is considered to have "reached the normal development of a child of its age." No similar standards were found in any of the other offices investigated.

As for the child's being "physically able to perform the work which it intends to do," in most places the examining physician makes no inquiry whatever into what the child intends to do, and under the existing law such an inquiry would serve no purpose. As the physical examination is given only when the child first goes to work and as he may have a dozen occupations before he is 16, this provision is generally held to mean, indeed, that he shall be physically able to do any work which is legal for a child under 16. Even in the offices where information is secured as to what the child expects to do—i. e., in Rochester, Albany, Cohoes, Little Falls, and Victory Mills—this information relates only to the first job, and the examining physician has no means of knowing whether the child will keep that position for more than a day or a week or where he will be employed afterwards. Nor has the examining physician any legal power to tell the child that he may not enter this occupation but that he may enter another. As a result, knowledge of the work which the child in the first instance "intends to do" has little or no effect on the character of the physical examination. Even if the examining physician attempted in each case to consider the kind of work proposed, his acquaintance with the demands made by different occupations on the strength and vitality of children is generally too meager to permit of valuable discrimination. In New York State, therefore, enforcement of the pro-

vision that the child must be "physically able to perform the work which it intends to do" is made impossible by the fact that the physical examination is made only before the first position.

Medical inspection of schools, though new and incomplete, is general in the larger cities of New York State, and it would be easy for the examining physician at the certificate office to have the benefit of all information secured in the schools as to the physical condition of applicants for employment certificates. But in only one place visited—Rochester—is any effort made to correlate the certificate office examination with the school examination. The requirement in Rochester that a child applying for a certificate shall bring a health-record card showing the results of his school examinations ought to be in force in every city in the State. If necessary the law should be amended to this end.

Withholding certificates until minor physical defects are corrected has the excellent result that, by furnishing an economic motive for soundness, it induces many children to secure treatment for defects which otherwise would be neglected. The extent to which this can be carried without undue hardship to the child and his family depends, of course, upon the opportunities which the given city offers for free medical treatment. If there is a dental dispensary capable of accommodating all applicants, the rule in force in Rochester, for example, that no child with defective teeth shall go to work, seems a reasonable interpretation of the law; for physicians state that no child with defective teeth can be in perfectly "sound health."

Additional protection is furnished the child who is either temporarily or permanently refused a certificate by the follow-up work of school nurses to whom such cases are referred in New York City and Buffalo. In the other places the refusal is a warning to the child's parents and a protection from a specific danger. Where medical inspection of schools exists the child remains under the care of the school physician. The value of the examination to the child who is found physically unfit for work depends largely, of course, upon whether or not some one supervises what he does in place of the contemplated work and sees that he receives whatever treatment he needs.

The most serious defect in the physical protection of working children in New York State, however, lies in the lack of any effective supervision after they have entered industry. The certificate office merely opens for the child the door to wage earning. It has no legal right to inquire what happens to him after he has passed through that door.

When it is remembered that physical defects and weaknesses may become apparent only after a child has been tested by the strain of work, and also that young children are particularly liable to suffer

specific injuries as the result of certain occupations, this lack of complete provision for medical supervision during the early years of the child's industrial career seems a very serious matter. The medical inspectors of the industrial commission may require any child employed in a factory to have a physical examination, and the child's employment certificate may be revoked if he is found in bad condition. But the power of the medical inspectors to require children in factories to have physical examinations is so rarely exercised as to be of little or no practical value. And for a child employed anywhere else than in a factory no provision is made for physical examination after entering industry.

Educational requirements.—The sixth-grade requirement of the New York law constitutes an unusually high educational standard. Here again, however, lack of control by any central State agency leads to material differences in standards in different places. First, there is the usual difference in standards among schools, especially among unsupervised private and parochial schools. In first-class cities the law does not even provide for the countersigning, by the superintendent, of school records issued by the principals of such private and parochial schools. Second, there is the lack of uniformity in the interpretation of what is meant by completion of "the work prescribed for the first six years of the public elementary school or school equivalent thereto or parochial school."¹ The interpretation given to this phrase by the chief of the compulsory-attendance division of the State department of education, in answer to an inquiry from the Children's Bureau, was as follows:

This department holds that when a child has gone down through the grades, as outlined in the Elementary Syllabus, to the end of the sixth grade, he has met the educational requirements for a school-record certificate. The word "completed" is not interpreted to mean that the child shall have passed an examination out of the sixth grade, or any other examination, but that he has gone through the work of the first six years of the public elementary school or school furnishing a course of instruction equivalent to the course maintained in a public school. The reason why the child is not required to pass an examination is the fact that examination papers in rural schools are examined by the teacher in charge of the school; and, as there are about 10,000 variable standards of marking examination papers, the child under the marking of one teacher might be able to pass out of the sixth grade into the seventh, and fail if he were marked by teachers in other schools. We therefore hold that the word "completed" in the statute is not to be interpreted as referring to the passing of examinations.

This interpretation, however, is not generally known throughout the State, and in many cities where it is known superintendents are unwilling to follow it, holding, as seems more reasonable,

¹ Labor Law, secs. 73 and 165. For the text of these sections see pp. 122, 124. An amendment to the law, effective Feb. 1, 1917, requires that a child under 15 years of age must have completed the eighth grade. Acts of 1916, ch. 465. For the text of this act see Appendix, pp. 132-133.

that the legislature intended that a child should not go to work until he was able to pass an examination out of the sixth grade. As a result the actual educational acquirements of children leaving even public schools for work differ according to the locality. A child who lives in New York City, Utica, Little Falls, or Victory Mills must have been graduated from the sixth grade. But one who lives in Buffalo, Albany, Syracuse, or Tonawanda needs only to have sat for two years, and in Rochester, Cohoes, or Troy for one year, in a sixth-grade classroom.

Though the law provides that the form of all school records used in first and second class cities must be approved by the industrial commission and that all those used in other cities, towns, or villages must be furnished by this commission, the supervision thus made possible has been delegated by the commission to the State department of education and has never been effectively exercised. As a result, not even a standard form of school-record blank is in use throughout the State. Out of 17 third-class cities from which blanks were secured but which were not visited the school-record form used in 6 did not mention the sixth-grade requirement.

Even in the same public-school system central supervision is not always maintained over the issuing of school records. Lack of uniformity is practically inevitable, indeed, under a law which in one section¹ places upon the principal of each school the responsibility for issuing school records anywhere in the State, and in another section² places it upon the same officer in first-class cities and in school districts having less than 5,000 population and upon the superintendent of schools in other cities and school districts. It is not at all surprising to find that at least in the first-class cities, where according to both sections of the law school records are issued by the individual principals, the educational standard for these records differs widely according to the ideas of the various persons who issue them. In New York City, though examinations for school records are given by the principal of one school in each district, nominally under the direction of the district superintendent, no provision is made for uniformity of or for central supervision over the district examinations. In Buffalo no central control is exercised over promotions and no central office is notified when children leave school.

Under such a law, moreover, it is not surprising that in at least one city, Syracuse, where school records are supposed under the more recent amendment to be issued by the superintendent, the principals should be issuing them. Nor is it surprising that in all the

¹ Labor Law, sec. 73. Sec. 165 also makes the same provision. For the text of these sections see pp. 122, 124.

² Education Law, sec. 630, subsec. 2. For the text of this section see p. 128.

other cities included in this study where the superintendent signs school records, except Troy, Little Falls, and Tonawanda, he keeps in his office no register of the standing of individual pupils and therefore must depend wholly upon the statement of the principal as to the grade of an applicant for a such a record.

In some schools in New York City and Buffalo children have been coached in special classes in order to enable them to reach the educational standard for a school record. Under the present law such a class is legal only if it provides better methods of instruction and not if its course of study differs in any way from that of the regular sixth grade. In these classes, however, particular attention is usually paid to the so-called "essentials"—reading, writing, spelling, English grammar, geography, and arithmetic. And the very existence of such a class shows a frank and open desire to assist children to leave school for work.

In other schools, undoubtedly, especially in New York City but also in Buffalo, a child sometimes is shoved up, without any special coaching, from grade to grade, until it is made falsely to appear that he is entitled to a school record. Even the special examination given in New York City before a school record is issued, the purpose of which is to bring about uniformity of standards, does not always accomplish this purpose because ratings are sometimes modified and because the examinations themselves are not uniform, being in some cases adapted to fifth rather than to sixth grade pupils. In Rochester, it is said, an effective check is placed upon pushing up through the grades by the fact that duplicate records of each child's ratings are sent to the efficiency bureau at the end of each semester. But in New York City, though formerly similar records were kept in the office of the bureau of attendance, they were never used as a check.

In general it is safe to say that where no supervision exists over the issuing by principals of school records children can be easily pushed up through the grades so they can go to work when of legal age, and that this is very likely to be done when occasion arises. It is not uncommon in the congested districts of New York City and Buffalo to find a parent beseeching the principal of a school to let his child go to work. If there seems to be exceptional economic pressure in the home, or if the child is backward or troublesome, the principal is seriously tempted to yield to these entreaties and to give the child a school record. This action, however, not only deprives the child of the education to which the community has decided he is entitled before assuming the burden of self-support, but as it is done with his full knowledge it tends to diminish his respect for law.

The requirement of 130 days' school attendance either during the 12 months preceding the child's fourteenth birthday or during the 12 months preceding his application for a school record has been inter-

preted in New York City to mean that a child must secure an employment certificate as soon as he leaves school. In other parts of the State, however, the school-record blanks in use show quite different interpretations of this attendance requirement. The Rochester form, for example, provides only for a statement of the number of days' attendance since the child became 13 years of age. If the child was nearly 16, therefore, the 130 days' attendance entered might either have been scattered over nearly three years or have ended more than two years before his application for a school record.

The New York City interpretation seems to stretch the law in two different ways. In the first place it assumes that the 130 days of attendance must have been during the 12 months preceding application for a certificate, whereas the law says during the 12 months preceding application for a school record. In the second place it assumes that this attendance must always be before application, whereas the law says it can be either before becoming 14 years of age or before application, and fails to specify in which cases it may be one and in which cases the other.

Unless the law is stretched in these ways the requirement seems of little value and may become a great hardship to certain children. For a child who has been living for a year in New York or any other State having a compulsory education law and who has never before held a certificate it is no hardship because it means simply compliance with that law, nor is it a hardship for an immigrant child under 16, for such a child can rarely secure a certificate inside of a year because of lack of knowledge of the English language. On the other hand, this attendance requirement, to which there are no exceptions and which can not be waived as in Massachusetts, may become, if the law is literally enforced, a serious hardship to the child who comes into New York State after having been legally at work on an employment certificate in some other State. Such a child, even if he meets the sixth-grade requirement of the New York law, may not have been in school 130 days during the year before becoming 14 or during the year preceding his application, and so is not entitled to a New York certificate. Yet he has complied with every law of the State where he has lived, and also has attained the educational standard of the New York law.

As for the literacy test required by the provision that the issuing officer, after examination, must file a statement "that the child can read and legibly write simple sentences in the English language," the degree of education required by this provision is so far below that required to obtain a school record that it seems natural for issuing officers to accept the school record as sole evidence of educational fitness for work and to give no examination for literacy. Indeed, a literacy examination is given only in New York City and Buffalo, and in Rochester an arithmetic examination in case the child appears

illiterate or can not readily speak English. Even in these places recognition is shown of the discrepancy between the grade requirements and the test—in New York City by using a third-grade reader for the test, in Buffalo by using a fifth-grade reader, and in Rochester by testing the child in fractions instead of in reading or writing. Naturally the only children refused certificates as a result of such tests as these are children whose school records are virtually fraudulent. Nevertheless the number of refusals in New York City because of failure to pass the literacy test shows the great need for such a test in other cities.

In spite of the legal provision that a school record must be issued on demand "to any child who, after due investigation and examination, may be found to be entitled to the same,"¹ in some cities the school authorities have introduced certain highly desirable extra-legal requirements for obtaining such a record. In Buffalo, for example, no school record is issued until the parent has signed a blank form giving his or her consent and stating the reason for the child's going to work. In Albany, Troy, and Little Falls the child has to prove that he has been promised employment before he is given a school record. This procedure practically means that, whatever periods of idleness he may have later, he goes straight from school to work. In no other place visited, however, is any such method used to prevent the child's securing a school record merely in order to avoid going to school. And the law makes no effective provision for the prevention of this unfortunate break in the child's life.

The New York law makes no exception of children who are mentally defective. Such children, if unable to complete the sixth grade, can not legally go to work until they are 16. In Buffalo, however, retarded children are sometimes given the Binet test and, if found mentally defective, are occasionally permitted to go to work without having fulfilled the educational requirements of the law. The problem thus dealt with is one frequently encountered in other certificate offices throughout the country, but it is doubtful whether this solution, clearly illegal in New York, is one which it would be well to incorporate into law, even if special supervision were to be exercised over these children after they had gone to work. The problem should be considered as primarily one of education and not of labor regulation.

The lack of compulsory continuation schools for employed children and of enforcement of the compulsory evening school attendance law have already been mentioned. The present legal provisions relating to continuation schools do not adequately protect the child, as there is no law requiring that the hours of attendance shall be included in

¹ Education Law, sec. 630, subsec. 2. For the text of this section see p. 128.

the legal hours of labor. As for evening-school attendance, if the child needs more education than that with which he goes to work, he should be permitted to secure it during working hours at a part-time or continuation school and should not be compelled to spend in a schoolroom the leisure he needs for rest and recreation.

Enforcement.—In the actual prevention of employment of children under 14 and under 16 without certificates there is probably almost as great lack of uniformity between cities as in the application of the standards for going to work. Though factory inspectors are supposed to cover the entire State, and mercantile inspectors the first and second class cities, with a fairly uniform degree of thoroughness, these inspectors can not visit establishments often enough—inspections are made usually only about once a year—to do more than a small part of the work of enforcing the child-labor law. The rest must be done by local school authorities, who are expected to see that children once in school stay there until legally released and that children not in school are sent there as soon as possible. If the work of local teachers, attendance officers, census enumerators, and other school officials is not thoroughly done, it is practically impossible effectively to enforce any child-labor law.

To keep children in school it is necessary that all absences be promptly reported, that transfers be reported both by the school which the child leaves and by the one to which he goes, and that attendance officers investigate within a reasonable period every case of absence. This applies to children attending private as well as public schools. In New York City the system devised for keeping children in school is excellent, and the forms for reporting absences and transfers are used by many private and parochial schools as well as by public schools. In Buffalo, although the law gives the permanent census board power "to make such rules and regulations as may be necessary to carry out" the provisions in regard to school attendance, individual principals devise their own methods of reporting both absences and transfers, and some of them make no report to the permanent census board of a child who has left to go to another school. In such a case, if the child did not enter the other school he might stay at home or on the street; or if nearly 14 years of age, he might drift into illegal employment and be found only accidentally by an attendance officer or an inspector. Conceivably the same thing might occur in Rochester, where the school the child is leaving merely notifies by telephone the school to which he is to go of the transfer, leaving it to the latter to notify the efficiency bureau whether or not the child appears. In Rochester, however, it is said that between the check-up systems of the efficiency bureau and of the permanent census board it is almost impossible for a child of school age to escape the authorities. The weekly roll call for changes of address in the

Rochester schools is also of great assistance in keeping track of children. In the smaller cities investigated reports of absences and transfers are made with more or less regularity to attendance officers; but since as a rule no records of individual schools are kept at the office of the superintendent and reports are only occasionally received from private and parochial schools, there is no way of knowing how well school attendance is enforced.

The extent to which school attendance of children not enrolled can be enforced depends on the time attendance officers have for other work than following up reported absences, on their vigilance in this work, on the cooperation of police officers and others, and on the thoroughness with which the school census is taken and its results checked with the school records. In general the school census is of more assistance in enforcing school attendance in the rural districts, where an annual enumeration is made, than in any city except those of the first class, which have permanent census boards. In the other cities, indeed, the census is of practically no use for more than one year in four, because it is taken only every fourth year. This condition should be remedied by an amendment to the law requiring a thorough school census to be taken in every part of the State at least annually.

In the three first-class cities the permanent census boards not only locate children 4 to 18 years of age in order that the school-attendance laws may be enforced but also collect facts relating to the employment of children. This system of census enumeration has been of great assistance in locating children from other parts of the United States and immigrant children of school age not enrolled in any school. It also aids in finding children illegally absent from a school, public, private, or parochial, which does not regularly report its absentees. Permanent census boards, indeed, seem to be needed in other cities.

Too little use is made of the opportunity which the certificate office affords to discover children who ought to be in school. The names of children who receive or are actually refused certificates are generally sent sooner or later by the health department to the school department. But except in the New York City offices it is not customary in the cities visited even to take the names of children who apply at the certificate office without the requisite documents and are sent away without having either received or been refused certificates. Thus an opportunity is lost of locating newcomers to the city who, not being enrolled in any school, may easily go to work without certificates when they find they can not meet the requirements of the certificate law. In the New York City offices, moreover, these names until recently were taken simply as a matter of convenience and were not reported to the school authorities.

One difficult problem is the enforcement of school attendance of children who have completed the grade requirements for a school record. If such a child simply refuses longer to go to school without taking out a school record the parents are, of course, subject to a penalty, though if the child is over 14 years of age it is always difficult to secure a conviction for nonattendance at school. But in many such cases the same measures may be taken as in the case of a certain 14-year-old Buffalo girl. This girl was repeatedly told by the attendance officers that she could not receive her school record when she wanted it unless she returned to school, but attempts to force her back into school were unsuccessful even after court procedure. Several months later, when she applied for a school record, it was not granted and she had to return to school for several months in order to have attended 130 days next preceding the date of receiving the record.

If, however, a child takes out a school record and then fails to apply for a certificate, or if for some reason the granting of the certificate is delayed, the problem is more difficult. In at least one case in New York City the group of children already mentioned who had taken out school records and failed to apply immediately for employment certificates were later refused certificates on the ground that the 130 days' school attendance required by law had not been during the year preceding their applications for certificates. But if the parents had chosen to take the matter into court, it is doubtful, as has been pointed out, whether this interpretation would have been upheld, for as the law now reads the school attendance must have been during the year preceding the child's fourteenth birthday or "his application for such school record."¹ It is even doubtful, as will be seen later, whether in cities or school districts having less than 5,000 inhabitants the parent could be punished in such a case for violation of the compulsory education law.

Breaks between school and work which occur as a result of delay in securing certificates are not uncommon. In New York City, school principals do not report to any central authority the fact that a school record has been issued to a child, although such reports might easily be required by the bureau of attendance and might assist in keeping the child in school. In theory the name of a child is not removed from the school register until the school is officially notified that the child has received a certificate, and the absence of a child with a school record is supposed to be reported like that of any other child. But in practice these children are frequently not kept in school, as principals expect them soon to leave permanently. Cases, indeed, in which children have been out of school for several months before receiving employment certificates can be found by comparing

¹ Labor Law, secs. 73 and 165. For the text of these sections see pp. 122, 124.

the records of the bureau of attendance with those of the certificate office in New York City. One child, for example, received his school record on November 25, 1914, and his certificate on February 13, 1915; another received his school record on January 21 and his certificate on April 30, 1915. In at least one case in which three months elapsed between the giving of a school record and the granting of a certificate the attendance officer had called almost every week and each time had found the child waiting for his birth record and having his teeth treated.

In other places the same breaks undoubtedly occur. In Buffalo, on account of the lack of effective regulation by the permanent census board, a child who has received a school record may easily drop out of school without the attendance department even knowing about it, for only a few principals report to the board the issuing of a school record. In one week, indeed, it was said that out of 43 applicants for certificates at the issuing office, 13 of whom were refused certificates, in only 4 cases had the permanent census board been notified of the issuing of a school record. In Rochester, on the other hand, not only is the school record withheld until all other requirements for a certificate have been fulfilled, but the efficiency bureau receives word whenever a school record is issued to a child and checks up all records with the reports of certificates issued. But in the second and third class cities visited no regular system of notifying the school authorities of certificates granted or refused was found.

In general it is safe to say that many children do not stay in or return to school during periods of waiting for their certificates, and that to make them do so would be an almost impossible task for the attendance officers. Indeed, only a rigid follow-up system could prevent children from absenting themselves from school after they have their school records. And such a system would seem worth while only if it were for the purpose of making certain that the child passed directly from the school into some sort of profitable work. But if it were once determined that the child had to have a job as well as a certificate before he could leave school, and that he had to keep a job or else return to school, it would seem desirable to educate children and parents to the idea that the school record and the promise of employment were both prerequisites to an employment certificate and that such a promise was a prerequisite to leaving school.

Another difficult problem is presented by children who wish or whose parents wish them to stay at home to help in nongainful ways. The law provides that a school-record certificate shall be issued to any child who has completed the sixth grade¹ and that a child regularly employed under an employment certificate in a city or school district

¹ Education Law, sec. 630, subsec. 1. For the text of this section see p. 177.

having a population of 5,000 or more or regularly employed elsewhere under either an employment or a school-record certificate shall be exempt from school attendance.¹ Another section says that to be exempt from school attendance a child must be "regularly and lawfully engaged in any useful employment or service."²

There is evidence that in many places "any useful employment or service" is interpreted to mean housework or chores at home; that children are often permitted to stay at home for such work on school-record certificates; and that their "employment" varies all the way from household drudgery to idleness. Until the fall of 1913, when the law was amended, this was the interpretation in Rochester; but at that time it was decided that henceforth every child between 14 and 16 must be in possession of an employment certificate or be in school. In Rochester, therefore, as would be expected, approximately the same number of employment certificates are regularly granted in a given time as the number of school records issued by all the public, private, and parochial schools. From September 1, 1913, to July 1, 1914, for example, 1,315 employment certificates and only about 762 public-school records were issued, the remaining certificates being granted on records from private and parochial schools. In Albany, on the other hand, during the same period only 299 employment certificates but 483 public-school records were issued; and in Troy, from October 1, 1913, to July 1, 1914, the reports showed 131 certificates and 137 public-school records. As in both Albany and Troy a considerable number of children with parochial-school records must have been granted certificates, it is evident that many children in these cities secure school records who do not at once secure certificates or enter any gainful employment. These children may later go to work illegally.

Staying at home on a school record alone is plainly contrary to the compulsory education law in any city or school district having a population of 5,000 or over, but does not appear to be so in the smaller places if a child can show he is engaged "in any useful employment or service." A child who holds an employment certificate anywhere in the State may stay out of school to work at home as well as in a gainful occupation.

As for unemployed children, or those who hold certificates but are not at work, though the compulsory education law requires that such children shall be in school, the certificate law contains no provision which could aid in the enforcement of school attendance. When a child has left the office of the department of health with his employment certificate he is still responsible to two officials, the factory inspector if he is employed and the attendance officer if he is not

¹ Education Law, sec. 624. For the text of this section see p. 126.

² Education Law, sec. 621. For the text of this section see p. 125.

employed; but in both cases the officer has to catch the child before he can exercise in any effective way his authority. Unless a factory inspector or an attendance officer happens to come his way the child is free to do as he pleases—work in any occupation, legal or illegal, or loaf on the streets. He carries his license to work in his pocket and, if he finds a job, gives it to his employer to keep until he quits, when he may put it back in his pocket or may carry it to another employer. No public authority is notified when he begins work or when he stops, and no public authority knows where he is or what he is doing. If an attendance officer challenges him on the street, he produces his certificate and claims to be hunting for work; and generally the attendance officer tells him merely that if he does not find a job soon he must return to school. But the attendance officer has no means of knowing when or where or whether he finds work. In New York City the bureau of attendance attempts to see that when a child receives a certificate he goes to work, but it has no means of knowing how long he continues to work, whether a day or a week or a year. The same thing is true in the other cities where the child must have a job before securing a certificate. In other words, the child, when he leaves the health office with his certificate, has practically escaped from any effective supervision by the school authorities who up to that time have bounded his horizon.

In spite of this lack of provision for knowing when children are out of work, unemployed children are sometimes returned to school by vigilant attendance officers. In New York City a special continuation class for unemployed boys is maintained in one of the elementary schools, but most of the boys attending are over 16 years of age and attendance is voluntary. In Buffalo unemployed boys under 16 are sometimes put in the special employment-certificate class. But outside of the first-class cities it seems to be generally considered that an employment certificate is itself a license to stay out of school, and in the other cities investigated no attempt is made to return unemployed children to school. Whatever effort is exerted anywhere to return an unemployed child is perfunctory, because the attendance officers know that if they take such a case into court the judge is almost certain to hold that the child must be given an opportunity to hunt for work and that a violation of school attendance under such circumstances is purely technical.

Proper provision for the unemployed child in the school system would, of course, make it much easier as well as better worth while to send such children back to school. But it should not be forgotten that permitting these children to stay out of school is a plain and direct violation of the law which says that, for exemption from school attendance, the child from 14 to 16 years of age must not only hold a certificate but must be "regularly and lawfully engaged in any

useful employment or service."¹ If the law is to be enforced, the problem of the unemployed child must be faced.²

Industrial inspection is at best an incomplete method of enforcing a child-labor law. Children move so often from place to place that no reasonable frequency of inspection is a guaranty against illegal employment. In New York State experience has shown that an inspector himself must see a child working illegally to have an adequate basis for prosecution. In large establishments inspectors do not have time to look up each child and find his certificate, but can make a test only of a sample of the children who appear to be under 16 years of age. The child's signature on the certificate, however, is a help in identification and assists the inspectors in their work.

One of the important problems of inspection is, of course, what action to take when a child is found who is suspected to be under 16 but claims to be over that age. If the inspector challenges the ages of a considerable number of children in an establishment it not only antagonizes the employer toward the child-labor law but is likely to lead to the discharge of children who later may be found to be over 16 and legally employed. It is because of this danger of unnecessary hardship to the child, as well as to secure evidence of violation, that inspectors in doubtful cases themselves often undertake to secure evidence of the ages of the children instead of serving the legal notice which requires that the employer within 10 days either furnish such evidence or discharge the child. In any event it depends upon the judgment of the individual inspector whether or not the age of any child is challenged.

One hindrance to strict enforcement of the law, indeed, is lack of any uniform provision for issuing statements of age to children over 16. In New York City such statements of age are issued, but nowhere else in the State is there any provision for documentary evidence of the ages of children who are over 16. The simplest way to prevent an employer's evading the law by hiring a child whom he states he believes to be over 16 and discharging the child when the inspector challenges the age is to require employers to keep on file for older children, perhaps for all minors, statements of age issued by some responsible agency upon the same evidence of age as is required for an employment certificate. Inspectors could then demand either employment certificates or statements of age for all children up to whatever age might be determined upon as likely to cover all

¹ Education Law, sec. 621. For the text of this section see p. 125.

² It has been suggested in New York City, first, that employers be required to send to the bureau of attendance a notice of termination of employment for each child; second, that attendance officers inspect monthly all places of employment and check up the lists of children to see what children have left and to force an explanation from employers who fail to report the names of children who have left their employ; and, third, that as a further means of discovering changes of employment made by children employers be required to enter on the back of each employment certificate before returning it to the child the dates of beginning and of terminating employment, the character of the work, and their own names and addresses.

suspicious cases. But if an employer is held rigidly responsible for knowing the age of any child employed and if instead of merely being required to discharge the child he is penalized when one is found without a certificate, employers themselves will desire such certificates of age as a means of self-protection.

Though probably children under 14 are not often employed in large manufacturing establishments in New York State, it seems likely that the certificate law may be violated frequently and in all places by two classes of children between 14 and 16 years of age; first, newcomers to the State, especially foreigners; and second, other children who have escaped from the jurisdiction of the school by securing employment certificates but who try to avoid the legal disabilities of their age by pretending to be over 16. As one of the supervising inspectors says: "A child between the ages of 14 and 16 years frequently fails to acknowledge that he has an employment certificate or even states that he has none and represents himself to the employer as over 16 years of age. He may claim to be unable to secure a birth certificate, school record, or record of any kind by which to identify himself or establish his age in order to work longer hours, obtain higher wages, or be allowed employment on machinery. When such cases are found by the inspector the only option the inspector has, in justice to the employer, is to require proof of age or dismiss the child within 10 days of notice, the result being in most cases that the child hires out at some other establishment and awaits detection again."¹

Except in factories and in mercantile and other establishments in first and second class cities there was found no industrial inspection in the places visited, and only school-attendance officers, who are at best little interested in what occurs during vacations and outside of school hours, concern themselves with the employment of children. The labor law, in fact, does not provide for supervision by any central agency over the inspection of mercantile establishments in other cities and in villages of 3,000 or over, and the State department of labor has no more authority to demand that such inspection be made than has the State department of health. For inspection of mercantile establishments in villages of less than 3,000 no legal provision whatever exists. It seems safe to say, therefore, that outside of first and second class cities little is known in regard to the employment of children anywhere except in factories.

Summary.—Lack of uniformity between cities due to lack of State-wide supervision is so conspicuous in the administration of the New York child-labor laws that it is difficult to say what are the strong or weak features of the system as a whole. In spite of repetitions and even contradictions and ambiguities in the law, the standard set is high; the evidence of age required seems adequate; the physical ex-

¹ Thirteenth Annual Report of the Commissioner of Labor, State of New York, 1913, p. 47.

amination must show not only that the child is in "sound health" but that he is physically able to do the work proposed; and the requirement of completion of the sixth grade¹ is an unusually high educational standard for the employment of children under 16 years of age in a large industrial State.

These standards probably are as rigidly enforced as could reasonably be expected in many places, including New York City, which contains more than half the working children of the State, and where the foreign element makes the problem particularly difficult. New York State had in 1910, however, over 60,000 working children, and, as has been seen, in most of the cities included in this study the methods of administration in use were found to have both good and bad features. If all three of the first-class cities, where private agencies have done much to secure efficient enforcement, were assumed to have developed the best possible methods under existing laws, the fact would still have to be faced that in 1910 New York State had over 18,000 working children 14 and 15 years of age—not far from double the entire number of gainfully employed children in Connecticut in that year—scattered among second and third class cities and towns and villages and protected only by the methods, sometimes good and sometimes bad, in use in these smaller places. Even if all the children working in agricultural pursuits and all those working in personal and domestic service outside of the first-class cities are deducted, New York State in 1910 had over 10,000 children at work in other gainful occupations elsewhere than in first-class cities—about the same number as were engaged in all gainful occupations in the entire State of Connecticut. All these children, as well as those in first-class cities, are dependent for protection upon the State child-labor laws and their efficient enforcement.

The trouble is that in one city the administrative machinery breaks down at one point and in another city at another point. In some places parents' affidavits are regularly taken as evidence of age; in some the physical examination is merely perfunctory; and in some the sixth-grade requirement is sometimes nullified in practice by shoving children up in grades and by other means. In short, the lack of careful supervision by any central office means that the high legal standards set for entering industry are so unevenly enforced that it is impossible to point out any one uniformly strong feature of the system as a whole.

The first, and perhaps greatest, need in New York, therefore, is machinery for securing uniformity throughout the State on three points: First, evidence of age; second, physical condition; and third, educational attainments. Under the present system such uniformity can be secured only by cooperation among three separate departments

¹ This provision has been amended by Acts of 1916, ch. 404. For the text of this act see pp. 132-133.

dealing with health, labor, and education. A curious feature of the situation, moreover, is that, though the health department has jurisdiction over evidence of age, the labor department practically determines the minimum number of points to be covered in physical examinations given by health officers. If health officers are to issue employment certificates, it certainly would seem more logical for the State department of health to supervise not only evidence of age, which rests upon vital statistics, but all matters relating to the physical examination. The issuing officers should also have power to give all children an educational test suited to the grade which they are supposed to have attained, and some central authority—most reasonably the State department of education—should determine the character of test to be given.

The need for greater centralization is further shown by the lack of cooperation between the various agencies which at present are charged with the duty of enforcing the law. No systematic plan of reporting between the department of labor and the school authorities exists anywhere in the State. When an inspector orders an employer to discharge a child or orders a child who is working illegally to return to school, he has no way of knowing whether or not the child actually returns. The inspector's authority ends with seeing that the employer discharges the child. In other words, the department of labor has authority only over the employment of children. In New York City for a few years the department of labor regularly reported to the compulsory-education department the names of children found working illegally; but many of them proved to be working only on Saturdays or after school hours, and as the department of labor did not know whether or not children reported were followed up and returned to school the plan was finally dropped. At the time of this investigation, when a child found illegally employed by an inspector anywhere in the State was discharged, he was allowed—because of this lack, in the laws themselves or in their administration, of provision for following him up—to slip from under the protection of any law. Greater cooperation among the various agencies could remove many of the present evils, but such cooperation is difficult both to arrange and to maintain in effect. The only remedy, therefore, for the evils of the present system seems to be centralization of authority over the administration of child-labor laws in some State agency which can supervise the work of all the local agencies concerned and can itself be held rigidly to account for its responsibilities toward the children of the State.

Even with thorough enforcement, however, such a law as that of New York, under which children who are at work on certificates are released from all supervision except the infrequent visits of inspectors, does not offer adequate protection to young wage earners in the first years of their working lives.

APPENDIX.

APPLICATION OF LAWS.

The child-labor laws of New York State are complex and verbose. Many sections overlap each other in content. Sometimes this overlapping involves merely useless repetition, but sometimes it involves real or apparent contradiction. Five long sections are repeated, practically word for word, applying in one case to employment in factories and in the other case to employment in mercantile and other establishments in cities having 3,000 or more inhabitants.¹ The provisions in regard to the powers and duties of inspectors in relation to child labor are scattered through at least six different sections.² The labor law says that school records shall be "signed by the principal or chief executive officer of the school which such child has attended,"³ while the education law, which takes precedence merely because more recently amended, says that they shall be signed—

"a In a city of the first class by the principal or chief executive of a school.

"b In all other cities and in school districts having a population of 5,000 or more and employing a superintendent of schools, by the superintendent of schools only.

"c In all other school districts by the principal teacher of the school."⁴

The greatest degree of complexity, however, appears only when an attempt is made to discover the exact application of the minimum-age and employment-certificate provisions—the corner stone upon which rests the entire structure of child-labor legislation.

No single minimum-age or employment-certificate law applies to all places of employment in all localities and at all times. Instead, five sections of the labor and compulsory education laws apply to different industries, or to places of different sizes, or only to the time when schools are in session. The accompanying chart shows the exact application of each of these sections.

¹ Labor Law, secs. 71, 72, 73, 75, 76, and secs. 162, 163, 164, 165, 166, and 167. For the text of these sections see pp. 120-122, 124.

² Labor Law, secs. 43, 56, 59, 76, 167, and 172. For the text of these sections see pp. 116, 118, 119, 122, 124.

³ Labor Law, secs. 73 and 165. For the text of these sections see pp. 122, 124.

⁴ Education Law, sec. 630, subsec. 2. For the text of this section see p. 123.

The minimum age of 14 applies to employment, first, in any place in the State in factories at any time;¹ second, in cities and villages having a population of 3,000 or more in mercantile establishments, business offices, telegraph offices, restaurants, hotels, apartment houses, theaters and other places of amusement, bowling alleys, barber shops, and shoe-polishing establishments, in the distribution or transmission of merchandise, articles, or messages, and in the distribution or sale of articles at any time;² and third, anywhere in the State "in any business or service whatever" during "any part of the term during which the public schools of the district or city in which the child resides are in session."³ But the section of the law which prohibits employment under 14 in factories specifically provides that "nothing herein contained shall prevent a person engaged in farming from permitting his children to do farm work for him upon his farm;" and also that "boys over the age of 12 years may be employed in gathering produce, for not more than six hours in any one day, subject to the requirements" of the education law.⁴ The employer is responsible for violation of any minimum-age requirement.

Employment certificates are required of children from 14 to 16 years of age for employment, first, in any place in the State in factories,⁵ mercantile establishments, business or telegraph offices, restaurants, hotels, and apartment houses, and in the distribution or transmission of merchandise or messages;⁶ second, in first and second class cities in any occupation;⁷ and third, in cities and villages having a population of 3,000 or more in theaters and other places of amusement, bowling alleys, barber shops, and shoe-polishing establishments, in the distribution of articles other than merchandise and messages, and in the sale of articles.⁸ In addition, school-record certificates are required for employment of children 14 to 16 years of age in any occupation and in any place where employment certificates are not required,⁹ i. e., in places of less than 3,000 inhabitants in theaters and other places of amusement, bowling alleys, barber shops, shoe-polishing establishments, in the distribution or transmission of articles other than merchandise or messages, and in the distribution or sale of articles; and anywhere outside of first and second class cities in any occupation whatever not specifically mentioned, except that in places of over 5,000 inhabitants children must hold employment certificates in order to be exempt from school attendance. It is to be noted particularly that children employed by peddlers or in places of amusement in the smaller cities are not required to hold employment but only school-record certificates. The principal significance of this lies in the fact that amusement resorts,

¹ Labor Law, sec. 70. For the text of this section see p. 120.

² Labor Law, sec. 162. For the text of this section see p. 124.

³ Education Law, sec. 626, subsec. 1. For the text of this section see p. 126. In order to receive their full apportionment of public moneys all schools must be in session at least 180 days. Education Law, sec. 492 as amended by Acts of 1913, ch. 511.

⁴ Labor Law, sec. 70. For the text of this section see p. 120.

⁵ Labor Law, sec. 70; Education Law, sec. 626, subsecs. 2 and 3. For the text of these sections see pp. 120, 126.

⁶ Education Law, sec. 626, subsecs. 2 and 3. For the text of this section see p. 126.

⁷ Education Law, sec. 626, subsec. 3. For the text of this section see p. 126. Cities of the first class have a population of 175,000 or more; cities of the second class, a population of between 50,000 and 175,000; cities of the third class, a population of less than 50,000; villages may vary widely in population; towns are municipal corporations comprising the inhabitants within their boundaries. The village is a part of the town but the city is not. Towns have no stipulated population in New York State.

⁸ Labor Law, sec. 162. For the text of this section see p. 124.

⁹ Education Law, sec. 626, subsec. 2. For the text of this section see p. 126.

ANALYSIS

(1) Factories

(2) Mercantile es
Business off
Telegraph off
Restaurants
Hotels
Apartment h
Distribution
ages

(3) Theaters or
Bowling alle
Barber shop
Shoe-polish
Distribution
merchand
Distribution

(4) Other occup

1 The comp
superintendent
assumed that ev
46446

including dance halls, skating rinks, etc., are frequently situated in small suburbs of large cities. The occupations not mentioned would include, of course, domestic work—for example, nurse maid; farm work, such as picking fruit; and other miscellaneous occupations. Though the majority of employers and of children are covered by the employment-certificate provisions there appear to be many for whom only school-record certificates are required.

The first thing discovered in examining the various sections of the law is that the minimum age for employment and the ages when either employment or school-record certificates are required do not exactly dovetail because they do not apply to exactly the same places of employment. For a child under 16 to stay out of school anywhere for any purpose he must have some form of certificate.¹ For employment out of school hours or during school vacations, however, three out of the five sections relating to employment certificates, each of which has a different application, provide only for issuing certificates to children from 14 to 16 years of age and therefore make no provision for children under 14 who, nevertheless, may be employed in certain places during school vacations. The section of the labor law relating to factories, for example, specifically permits boys over 12 to be employed in gathering produce. If between 14 and 16 years of age such a boy apparently might be required to have an employment certificate² whether working during vacation or during the term that schools were in session; but if between 12 and 14—the very period when it is most important to prove that he is actually of an age to be legally employed—nothing in the law appears to prevent his working during vacations without any documentary evidence of the legality of his employment.³ Moreover, no minimum age is fixed and no form of employment certificate is required during school vacations for children under 14 for any occupation or in any place not specifically mentioned in the labor law—i. e., (1) employment anywhere in the State in factories⁴ and (2) employment in cities of over 3,000 inhabitants in mercantile establishments, business offices, telegraph offices, restaurants, hotels, apartment houses, theaters or other places of amusement, bowling alleys, barber shops, shoe-polishing establishments, or in the distribution or transmission of merchandise, articles, or messages, or in the distribution or sale of articles.⁵ In the former case the child who can gather produce during vacation without a certificate from the time he is 12 until he is 14, apparently may have to obtain a certificate, even for vacation work, as soon as he becomes 14. In the latter case, too, the child who from the time he is physically capable of any useful labor until he is 14 can be legally employed without a

¹ Education Law, sec. 624. For the text of this section see p. 126.

² Labor Law, sec. 70. For the text of this section see p. 120.

³ Such a case is not covered (1) by Labor Law, sec. 70, because this section requires certificates only for children "between the ages of 14 and 16"; (2) by Labor Law, sec. 162, because this type of employment is not mentioned as covered by this section, and even if it could by any stretch be considered to be covered, this section applies only to cities and villages having a population of over 3,000; (3) by Education Law, sec. 626, because this section requires certificates only for children "between 14 and 16 years of age"; (4) by Education Law, sec. 624, because this section applies only to school attendance, and therefore does not cover vacation employment; or (5) by Education Law, sec. 621, for both of the two last-given reasons. A child under 14 is not exempted from school attendance, even for employment, and Education Law, sec. 626, subsec. 1, makes it illegal to employ a child "in any business or service whatever, for any part of the term during which the public schools of the district or city in which the child resides are in session." This appears to make it illegal to employ any child under 14 after school hours while school is in session, and therefore restricts their employment to school vacations.

⁴ Labor Law, sec. 70. For the text of this section see p. 120.

⁵ Labor Law, sec. 162. For the text of this section see p. 124.

certificate during the long school vacations—in some nonfactory occupations anywhere and in any nonfactory occupation in a community which has less than 3,000 inhabitants—apparently has to obtain some kind of a certificate for such work after he becomes 14 years of age.¹

An analysis² of the exact application of the sections of the labor and education laws³ which require certificates for employment or for exemption from school attendance of children from 14 to 16 years of age increases rather than decreases the complexity. To discover for what occupations, in what localities, and at what times such a child must have either an employment certificate or a school-record certificate requires the careful consideration of four different places of employment or groups of such places,⁴ four classes of localities,⁵ and two elements of time.⁶ These provisions are contained in five separate sections of two distinct laws.

Of these five sections only two apply to the same places of employment and the same localities at the same times, and even these two differ somewhat in their requirements.⁷ One section of the labor law⁸ applies only to factories, but to factories anywhere in the State. The other section of the labor law applies to mercantile establishments and to a list of other places⁹—some but not by any means all of which are covered by one section of the education law. In other words, the places of employment mentioned in the section of the labor law referring to mercantile establishments must be divided into two groups, one of which is covered by requirements similar to those of the labor law relating to factories and the other by entirely different requirements in the education law. Moreover, the occupations not mentioned at all in the labor law constitute a fourth group covered only by the education law.¹⁰ The section of the labor law relating to mercantile and other establishments¹¹ does not apply to cities and villages of less than 3,000 population; two sections of the education law¹² create differences between cities and

¹ Doubt is thrown upon this interpretation, however, by the fact that the first part of sec. 626 of the education law, the only one relating to employment and not merely to school attendance, prohibits the employment of a child under 14 "in any business or service whatever" only during "any part of the term during which the public schools of the district or city in which the child resides are in session." Though in the subsections relating to certificates no mention is made of this limitation to school terms, it might be argued that this first provision limited the application of the entire section.

² The results of such an analysis are presented in tabular form on the chart facing p. 112.

³ Labor Law, secs. 70 and 162; Education Law, secs. 621, 624, and 626. For the text of these sections see pp. 120, 124, 125, 126.

⁴ (1) Factories; (2) mercantile establishments, business offices, telegraph offices, restaurants, hotels, apartment houses, distribution or transmission of merchandise or messages; (3) theaters or other places of amusement, bowling alleys, barber shops, shoe-polishing establishments, distribution or transmission of articles other than merchandise or messages, distribution or sale of articles; and (4) other occupations.

⁵ (1) Cities of the first and second classes; and (2) cities or school districts having over 5,000, (3) from 3,000 to 5,000, and (4) under 3,000 inhabitants.

⁶ Employment (1) during school hours and (2) outside of school hours.

⁷ Education Law, secs. 621 and 624. For the text of these sections see pp. 125, 126. The first of these sections provides that every child must attend school, and the second that every person in parental relation to a child must send the child to school. These two sections both distinguish between (1) children residing in cities or school districts having a population of 5,000 or more and employing a superintendent of schools, and (2) children residing elsewhere. For the first class of children the provisions of the two sections are practically the same, that children from 14 to 16 years of age must attend school unless they have employment certificates and are regularly employed. They are worded differently, however. For the second class of children—those living in cities or school districts having less than 5,000 inhabitants—the first section provides for exemption from school attendance if "regularly and lawfully engaged in any useful employment or service," and the second requires for such exemption either an employment certificate and regular employment in a factory or mercantile establishment, business or telegraph office, restaurant, hotel, apartment house, or in the distribution or transmission of merchandise or messages; or else a school-record certificate and regular employment in some other occupation or place.

⁸ Labor Law, sec. 70. For the text of this section see p. 126.

⁹ Labor Law, sec. 162. For the text of this section see p. 124.

¹⁰ Education Law, secs. 621, 624, and 626. For the text of these sections see pp. 125, 126.

¹¹ Labor Law, sec. 162. For the text of this section see p. 124.

¹² Education Law, secs. 621 and 624. For the text of these sections see pp. 125, 126.

school districts of under 5,000 population and those of 5,000 and over; and the third section of the education law¹ establishes for cities of the first and second classes different requirements from those for the rest of the State. Finally, two sections of the education law² relate only to school attendance and therefore do not affect vacation employment or employment before or after school hours, while the third section of the education law and both sections of the labor law³ relate to employment at any time.

Careful analysis makes the law finally comprehensible, as it brings out the fact that everywhere in the State a child between 14 and 16 must have either an employment or a school-record certificate, and that "regular employment" is required for exemption from school attendance—in other words, such a child must be either at school or at work while the schools are in session. This fact does not, however, obviate the practical disadvantages—especially from the point of view of enforcement—of laws so complicated that their exact application is difficult to determine. Nor are these disadvantages obviated by the fact that, if overlapping provisions apparently requiring both employment and school-record certificates are overlooked on the assumption that the latter can be ignored as themselves prerequisites to obtaining the former, it is possible after careful study to discover where and at what times employment certificates, and where and at what times only school-record certificates are necessary for the employment of children from 14 to 16 years of age.

¹ Education Law, sec. 626. For the text of this section see p. 126.

² Education Law, secs. 621 and 624. For the text of these sections see pp. 125, 126.

³ Labor Law, secs. 70, 162; Education Law, sec. 626. For the text of these sections see pp. 120, 124, 126.

LAWS RELATING TO EMPLOYMENT CERTIFICATES.

In effect Jan. 1, 1916.

Note.—[The duties, authority, and powers relating to the enforcement of labor laws heretofore exercised by the commissioner of labor, the deputy commissioner of labor, and the industrial board, have been transferred by chapter 674 of the Acts of 1915 to the industrial commission. In every case the new enforcing authority has been indicated in the text by an insertion in brackets, the former enforcing powers being omitted.]

REGULATED OCCUPATIONS.

DEFINITIONS.

Terms used in labor laws.—Employee. The term "employee," when used in this chapter, means a mechanic, workingman or laborer who works for another for hire.

Employer. The term "employer," when used in this chapter, means the person employing any such mechanic, workingman or laborer, whether the owner, proprietor, agent, superintendent, foreman or other subordinate.

Factory; work for a factory. The term factory, when used in this chapter, shall be construed to include any mill, workshop, or other manufacturing or business establishment and all buildings, sheds, structures or other places used for or in connection therewith, where one or more persons are employed at labor, except dry dock plants engaged in making repairs to ships, and except power houses, generating plants, barns, storage houses, sheds and other structures owned or operated by a public service corporation, other than construction or repair shops, subject to the jurisdiction of the public service commission under the public service commission law. Work shall be deemed to be done for a factory within the meaning of this chapter whenever it is done at any place, upon the work of a factory or upon any of the materials entering into the product of the factory, whether under contract or arrangement with any person in charge of or connected with such factory directly or indirectly through the instrumentality of one or more contractors or other third persons.

* * * * *

Mercantile establishment. The term "mercantile establishment," when used in this chapter, means any place where goods, wares or merchandise are offered for sale.

Tenement house. The term "tenement house," when used in this chapter, means any house or building, or portion thereof, which is either rented, leased, let or hired out, to be occupied, or is occupied in whole or in part as the home or residence of three families or more living independently of each other, and doing their cooking upon the premises, and includes apartment houses, flat houses and all other houses so occupied, and for the purposes of this chapter shall be construed to include any building on the same lot with any such tenement house and which is used for any of the purposes specified in section one hundred of this chapter.

Whenever, in this chapter, authority is conferred upon the [industrial commission], it shall also be deemed to include [its] deputies or a deputy acting under [its] direction. [Consolidated Laws 1909 volume 3 Labor Chapter 31 article 1 section 2 as amended by 1913 Chapter 529, by 1914 Chapter 512, and by 1915 Chapter 650]

Court decision.—A factory is a structure or plant where something is made or manufactured from raw or partly wrought materials into forms suitable for use.—*Shannahan v. Empire Engineering Corporation*, 204 N. Y. 543 (1913).

Opinion.—Departments maintained in department stores, clothing stores, and millinery shops, in which articles are made are factories.—Attorney General (1913).

ALL REGULATED OCCUPATIONS.

ENFORCEMENT.

Industrial commission to be head of the department of labor.—There shall be a department of labor, the head of which shall be the industrial commission. * * * [C L 1909 v 3 Labor C 31 art 3 s 40 as amended by 1915 C 674]

Powers of industrial commission; hindering commissioners or their deputies, etc., prohibited.—1. The commissioners, deputy commissioners, secretary and other officers

and assistants of the commission may administer oaths and take affidavits in matters relating to the powers and duties of the commission.

2. No person shall interfere with, obstruct or hinder by force or otherwise the commissioners, deputy commissioners, or any officer, agent or employee of the department of labor while in the performance of their duties, or refuse to properly answer questions asked by such officers or employees pertaining to the provisions of this chapter, or refuse them admittance to any place which is affected by the provisions of this chapter. * * * [C L 1909 v 3 Labor C 31 art 3 s 43 as amended by 1915 C 674]

Powers of industrial commission; investigations, etc.—The commission shall have power to make investigations concerning and report upon the conditions of labor generally and upon all matters relating to the enforcement and effect of the provisions of this chapter and of the rules and regulations of the commission. Each member of the commission and the secretary shall have power to administer oaths and take affidavits and to make personal inspections of all places to which this chapter applies. The commission shall have power to subpoena and require the attendance of witnesses and the production of books and papers pertinent to the investigations and inquiries hereby authorized, and to examine them in relation to any matter it has power to investigate, and to issue commissions for the examination of witnesses who are out of the State or unable to attend before the commission, or excused from attendance. [C L 1909 v 3 Labor C 31 art 3-a s 51 as added by 1913 C 145 and amended by 1915 C 674]

Regulations of industrial commission.—(1) The commission shall have power to make, amend and repeal rules and regulations for carrying into effect the provisions of this chapter, applying such provisions to specific conditions and prescribing means, methods and practices to effectuate such provisions.

* * * * *

(5) The rules and regulations of the commission shall have the force and effect of law and shall be enforced in the same manner as the provisions of this chapter.

(6) No provision of this chapter specifically conferring power on the commission to make rules and regulations shall limit the power conferred by this section. [C L 1909 v 3 Labor C 31 art 3-a s 51-a as added by 1915 C 674]

Opinion.—The [industrial commission] may adopt rules and regulations for the safety of factories more stringent than corresponding provisions of the Labor Law.—Attorney General (1913).

First deputy industrial commissioner to be inspector general; bureau of inspection; divisions.—The bureau of inspection, subject to the supervision and direction of the [industrial commission], shall have charge of all inspections made pursuant to the provisions of this chapter, and shall perform such other duties as may be assigned to it by the [industrial commission]. The first deputy [industrial commissioner] shall be the inspector general of the State, and in charge of this bureau subject to the direction and supervision of the [industrial commission], except that the division of industrial hygiene shall be under the immediate direction and supervision of the [industrial commission]. Such bureau shall have four divisions as follows: Factory inspection, homework inspection, mercantile inspection and industrial hygiene. There shall be such other divisions in such bureau as the [industrial commission] may deem necessary. In addition to their respective duties as prescribed by the provisions of this chapter, such divisions shall perform such other duties as may be assigned to them by the [industrial commission]. [C L 1909 v 3 Labor C 31 art 4 (as renumbered by 1913 C 145) s 53 as amended by 1913 C 145]

Appointment of factory and mercantile inspectors.—1. Factory inspectors. There shall not be less than one hundred and twenty-five factory inspectors, not more than thirty of whom shall be women. Such inspectors shall be appointed by the [industrial commission] and may be removed by [it] at any time. The inspectors shall be divided into seven grades. Inspectors of the first grade, of whom there shall not be more than ninety-five, shall each receive an annual salary of one thousand two hundred dollars; inspectors of the second grade, of whom there shall be not more than fifty, shall each receive an annual salary of one thousand five hundred dollars; inspectors of the third grade, of whom there shall be not more than twenty-five, shall each receive an annual salary of one thousand eight hundred dollars; inspectors of the fourth grade, of whom there shall be not more than ten, shall each receive an annual salary of two thousand dollars and shall be attached to the division of industrial hygiene and act as investigators in such division; inspectors of the fifth grade, of whom there shall be not more than nine, one of whom shall be able to speak and write at least five European languages in addition to English, shall each receive an annual salary of two thousand five hundred dollars and shall act as supervising inspectors; inspectors of the sixth grade, of whom there shall be not less than three and one of whom shall be a woman, shall act as medical inspectors and shall each receive an annual salary of two thousand

five hundred dollars; inspectors of the seventh grade, of whom there shall be not less than four, shall each receive an annual salary of three thousand five hundred dollars; all of the inspectors of the sixth grade shall be physicians duly licensed to practice medicine in the State of New York. Of the inspectors of the seventh grade one shall be a physician duly licensed to practice medicine in the State of New York, and he shall be the chief medical inspector; one shall be a chemical engineer; one shall be a mechanical engineer, and an expert in ventilation and accident prevention; and one shall be a civil engineer, and an expert in fire prevention and building construction.

2. Mercantile inspectors. The [industrial commission] may appoint from time to time not more than twenty mercantile inspectors not less than four of whom shall be women and who may be removed by [it] at any time. The mercantile inspectors may be divided into three grades but not more than five shall be of the third grade. Each mercantile inspector of the first grade shall receive an annual salary of one thousand dollars; of the second grade an annual salary of one thousand two hundred dollars; and of the third grade an annual salary of one thousand five hundred dollars. [C L 1909 v 3 Labor C 31 art 4 (as renumbered by 1913 C 145) s 54 as amended by 1913 C 145]

Factory-inspection districts; appointment of chief factory inspectors, etc.—For the inspection of factories, there shall be two inspection districts to be known as the first factory inspection district and the second factory inspection district. The first factory inspection district shall include the counties of New York, Bronx, Kings, Queens, Richmond, Nassau and Suffolk. The second factory inspection district shall include all the other counties of the State. There shall be two chief factory inspectors who shall be appointed by the [industrial commission] and who may be removed by [it] at any time and each of whom shall receive a salary of four thousand dollars a year. The inspection of factories in each factory inspection district shall, subject to the supervision and direction of the [industrial commission], be in charge of a chief factory inspector assigned to such district by the [industrial commission]. The [industrial commission] may designate one of the supervising inspectors as assistant chief factory inspector for the first district, and while acting as such assistant chief factory inspector he shall receive an additional salary of five hundred dollars per annum. [C L 1909 v 3 Labor C 31 art 4 (as renumbered by 1913 C 145) s 55 as added by 1913 C 145]

Duties and powers of industrial commission, factory inspectors, etc.—1. The [industrial commission] shall, from time to time, divide the State into sub-districts, assign one factory inspector of the fifth grade to each sub-district as supervising inspector, and may in [its] discretion transfer such supervising inspector from one sub-district to another; [it] shall from time to time, assign and transfer factory inspectors to each factory inspection district and to any of the divisions of the bureau of inspection; [it] may assign any factory inspector to inspect any special class or classes of factories or to enforce any special provisions of this chapter; and [it] may assign any one or more of them to act as clerks in any office of the department.

2. The [industrial commission] may authorize any deputy [industrial commissioner] or assistant and any agent or inspector in the department of labor to act as a factory inspector with the full power and authority thereof.

3. The [industrial commission], the first deputy [industrial commissioner] and his assistant or assistants, and every factory inspector and every person duly authorized pursuant to sub-division two of this section may, in the discharge of [its or] his duties enter any place, building or room which is affected by the provisions of this chapter and may enter any factory whenever [it or] he may have reasonable cause to believe that any labor is being performed therein.

4. The [industrial commission] shall visit and inspect or cause to be visited and inspected the factories, during reasonable hours, as often as practicable, and shall cause the provisions of this chapter and the rules and regulations of the [industrial commission] to be enforced therein.

5. Any lawful municipal ordinance,¹ by-law or regulation relating to factories, in addition to the provisions of this chapter and not in conflict therewith, may be observed and enforced by the [industrial commission]. [C L 1909 v 3 Labor C 31 art 4 (as renumbered by 1913 C 145) s 56 as amended by 1913 C 145]

Duties of division of homework inspection.—The division of homework inspection shall be in charge of an officer or employee of the department of labor designated by the [industrial commission] and shall, subject to the supervision and direction of the [industrial commission], have charge of all inspections of tenement houses and of labor therein and of all work done for factories at places other than such factories. [C L 1909 v 3 Labor C 31 art 4 (as renumbered by 1913 C 145) s 57 as added by 1913 C 145]

¹ With the possible exception of New York City ordinances (City of New York v. Trustees of Baller's Snug Harbor, 86 App. Div. 356, aff'd 180 N. Y. 537, and opinion by Attorney General, Jan. 16, 1904).

Appointment of chief mercantile inspector.—The division of mercantile inspection shall be under the immediate charge of the chief mercantile inspector, but subject to the direction and supervision of the [industrial commission]. The chief mercantile inspector shall be appointed and be at pleasure removed by the [industrial commission], and shall receive an annual salary not to exceed four thousand dollars. [C L 1909 v 3 Labor C 31 art 4 (as renumbered by 1913 C 145) s 58 as amended by 1914 C 333]

Mercantile inspection districts; duties and powers of industrial commission, mercantile inspectors, etc.—1. The [industrial commission] may divide the cities of the first and second class of the State into mercantile inspection districts, assign one or more mercantile inspectors to each such district, and may in his discretion transfer them from one such district to another; he may assign any of them to inspect any special class or classes of mercantile or other establishments specified in article twelve of this chapter, situated in cities of the first and second class, or to enforce in cities of the first or second class any special provision of such article.

2. The [industrial commission] may authorize any deputy [industrial commissioner] or assistant and any agent or inspector in the department of labor to act as a mercantile inspector with the full power and authority thereof.

3. The [industrial commission], the chief mercantile inspector and his assistant or assistants and every mercantile inspector or acting mercantile inspector may in the discharge of [its or] his duties enter any place, building or room in cities of the first or second class which is affected by the provisions of article twelve of this chapter, and may enter any mercantile or other establishment specified in said article, situated in the cities of the first or second class, whenever [it or] he may have reasonable cause to believe that it is affected by the provisions of article twelve of this chapter.

4. The [industrial commission] shall visit and inspect or cause to be visited and inspected the mercantile and other establishments specified in article twelve of this chapter situated in cities of the first and second class, as often as practicable, and shall cause the provisions of said article and the rules and regulations of the [industrial commission] to be enforced therein.

5. Any lawful municipal ordinance, by-law or regulation relating to mercantile or other establishments specified in article twelve of this chapter, in addition to the provisions of this chapter and not in conflict therewith, may be enforced by the [industrial commission] in cities of the first and second class. [C L 1909 v 3 Labor C 31 art 4 (as renumbered by 1913 C 145) s 59 as amended by 1913 C 145]

Duties and powers of division of industrial hygiene.—The inspectors of the seventh grade shall constitute the division of industrial hygiene, which shall be under the immediate charge of the [industrial commission]. The [industrial commission] may select one of the inspectors of the seventh grade to act as the director of such division, and such director while acting in that capacity shall receive an additional compensation of five hundred dollars a year. The members of the division of industrial hygiene shall make special inspections of factories, mercantile establishments and other places subject to the provisions of this chapter, throughout the State, and shall conduct special investigations of industrial processes and conditions. The commissioner of labor [industrial commission] shall submit to the industrial board [industrial commission] the recommendations of the division regarding proposed rules and regulations and standards to be adopted to carry into effect the provisions of this chapter and shall advise said board [commission] concerning the operation of such rules and standards and as to any changes or modifications to be made therein. The members of such division shall prepare material for leaflets and bulletins calling attention to dangers in particular industries and the precautions to be taken to avoid them; and shall perform such other duties and render such other services as may be required by the [industrial commission]. The director of such division shall make an annual report to the [industrial commission] of the operation of the division, to which may be attached the individual reports of each member of the division as above specified, and same shall be transmitted to the legislature as part of the annual report of the [industrial commission]. [C L 1909 v 3 Labor C 31 art 4 (as renumbered by 1913 C 145) s 60 as added by 1913 C 145]

Duties and powers of medical inspectors.—The inspectors of the sixth grade shall constitute the section of medical inspection which shall, subject to the supervision and direction of the director of the division of industrial hygiene, be under the immediate charge of the chief medical inspector. The section of medical inspection shall inspect factories, mercantile establishments and other places subject to the provisions of this chapter throughout the State with respect to conditions of work affecting the health of persons employed therein and shall have charge of the physical examination and medical supervision of all children employed therein and shall perform such other duties and render such other services as the [industrial commission] may direct. [C L 1909 v 3 Labor C 31 art 4 (as renumbered by 1913 C 145) s 61 as added by 1913 C 145]

Powers of industrial commission; information to be furnished upon request; hindering commissioners or their deputies, etc., prohibited; penalty.—The owner, operator, manager or lessee of any mine, factory, workshop, warehouse, elevator, foundry, machine shop or other manufacturing establishment, or any agent, superintendent, subordinate, or employee thereof, and any person employing or directing any labor affected by the provisions of this chapter, shall, when requested by the [industrial commission], furnish any information in his possession or under his control which [said commission] is authorized to require, and shall admit [it] or [its] duly authorized representative to any place which is affected by the provisions of this chapter for the purpose of inspection. A person refusing to admit such [industrial commission], or person authorized by [it], to any such establishment, or to furnish [it] any information requested, or who refuses to answer or untruthfully answers questions put to him by such [industrial commission], in a circular or otherwise, shall forfeit to the people of the State the sum of one hundred dollars for each refusal or untruthful answer given, to be sued for and recovered by the [industrial commission] in [its] name of office. The amount so recovered shall be paid into the State treasury. [C L 1909 v 3 Labor C 31 art 5 (as renumbered by 1913 C 145) s 64 as amended by 1913 C 145]

Factories to be registered with State department of labor.—The owner of every factory shall register such factory with the State department of labor, giving the name of the owner, his home address, the address of the business, the name under which it is carried on, the number of employees and such other data as the [industrial commission] may require. Such registration of existing factories shall be made within six months after this section takes effect. Factories hereafter established shall be so registered within thirty days after the commencement of business. Within thirty days after a change in the location of a factory the owner thereof shall file with the [industrial commission] the new address of the business, together with such other information as the [industrial commission] may require. [C L 1909 v 3 Labor C 31 art 6 s 69 as added by 1912 C 335]

FACTORIES.

MINIMUM AGE AND EMPLOYMENT CERTIFICATES.

Employment under 14 prohibited; certificates required from 14 to 16; farm work excepted under certain conditions.—No child under the age of fourteen years shall be employed, permitted or suffered to work in or in connection with any factory in this State, or for any factory at any place in this State. No child between the ages of fourteen and sixteen years shall be so employed, permitted or suffered to work unless an employment certificate, issued as provided in this article, shall have been theretofore filed in the office of the employer at the place of employment of such child. Nothing herein contained shall prevent a person engaged in farming from permitting his children to do farm work for him upon his farm. Boys over the age of twelve years may be employed in gathering produce, for not more than six hours in any one day, subject to the requirements of chapter twenty-one of the laws of nineteen hundred and nine, entitled "An act relating to education, constituting chapter sixteen of the Consolidated Laws," and all acts amendatory thereof. [C L 1909 v 3 Labor C 31 art 6 s 70 as amended by 1913 C 529]

Court decisions.—Under a former section, of which this is an amendment, the following decisions were rendered: Violation is a misdemeanor and prima facie evidence of negligence on the part of the employer; and a child employed in violation of the statute does not assume the risk of such employment and cannot be held guilty of contributory negligence.—*Marino v. Lehmler*, 173 N. Y. 530, 66 N. E. 572 (1901); *Sitts v. Walontha Co.*, 94 App. Div. 38 (1904); *Lee v. Sterling Silk Mfg. Co.*, 115 App. Div. 589, 93 N. Y. S. 560 (1906); *Fortune v. Hall*, 122 App. Div. 250 (1906); *Kenyon v. Sanford Mfg. Co.*, 119 App. Div. 570 (1907); *Danaber v. American Mfg. Co.*, 126 App. Div. 385 (1908); *Koester v. Rochester Candy Works*, 194 N. Y. 92 (1909). The prohibition is absolute and ignorance of the child's age is no defense.—*City of New York v. Chelsea Jute Mills*, 43 Misc. 266, 88 N. Y. S. 1085 (1904). But an officer of a corporation who has directed that no child shall be employed contrary to law is not liable if a subordinate, without his knowledge, illegally employs a child.—*People v. Taylor*, 192 N. Y. 398 (1908). Where a girl, 15 years old, without an employment certificate, was injured by defects in machinery, the master was liable.—*Crowley v. American Druggist Syndicate*, 138 N. Y. S. 642, 152 App. Div. 775 (1912).

Opinion.—A child under 14 years of age may not be employed in a factory or mercantile establishment which is owned or controlled by the child's parents.—Attorney General (1912).

EMPLOYMENT CERTIFICATES AND RECORDS.

Commissioner of health to issue certificates; age, school, and health records required; method of issuing.—Such certificate shall be issued by the commissioner of health or the executive officer of the board or department of health of the city, town or village where such child resides, or is to be employed, or by such other officer thereof as may be designated by such board, department or commissioner for that purpose, upon the

application of the parent or guardian or custodian of the child desiring such employment. Such officer shall not issue such certificate until he has received, examined, approved and filed the following papers duly executed, viz: The school record of such child properly filled out and signed as provided in this article; also, evidence of age showing that the child is fourteen years old or upwards, which shall consist of the evidence thereof provided in one of the following subdivisions of this section and which shall be required in the order herein designated as follows:

(a) Birth certificate: A duly attested transcript of the birth certificate filed according to law with a registrar of vital statistics or other officer charged with the duty of recording births, which certificate shall be conclusive evidence of the age of such child.

(b) Certificate of graduation: A certificate of graduation duly issued to such child showing that such child is a graduate of a public school of the State of New York or elsewhere, having a course of not less than eight years, or of a school in the State of New York other than a public school, having a substantially equivalent course of study of not less than eight years' duration, in which a record of the attendance of such child has been kept as required by article * * * [23] of the education law: *Provided*, That the record of such school shows such child to be at least fourteen years of age.

(c) Passport or baptismal certificate: A passport or a duly attested transcript of a certificate of baptism showing the date of birth and place of baptism of such child.

(d) Other documentary evidence: In case it shall appear to the satisfaction of the officer to whom application is made, as herein provided, for an employment certificate, that a child for whom such certificate is requested, and who has presented the school record, is in fact over fourteen years of age, and that satisfactory documentary evidence of age can be produced, which does not fall within any of the provisions of the preceding subdivisions of this section, and that none of the papers mentioned in said subdivisions can be produced, then and not otherwise he shall present to the board of health of which he is an officer or agent, for its action thereon, a statement signed by him showing such facts, together with such affidavits or papers as may have been produced before him constituting such evidence of the age of such child, and the board of health, at a regular meeting thereof, may then, by resolution, provide that such evidence of age shall be fully entered on the minutes of such board, and shall be received as sufficient evidence of the age of such child for the purpose of this section.

(e) Physicians' certificates: In cities of the first class only, in case application for the issuance of an employment certificate shall be made to such officer by a child's parent, guardian, or custodian who alleges his inability to produce any of the evidence of age specified in the preceding subdivisions of this section, and if the child is apparently at least fourteen years of age, such officer may receive and file an application signed by the parent, guardian or custodian of such child for physicians' certificates. Such application shall contain the alleged age, place and date of birth, and present residence of such child, together with such further facts as may be of assistance in determining the age of such child. Such application shall be filed for not less than ninety days after date of such application for such physicians' certificates, for an examination to be made of the statements contained therein, and in case no facts appear within such period or by such examination tending to discredit or contradict any material statement of such application, then and not otherwise the officer may direct such child to appear thereafter for physical examination before two physicians officially designated by the board of health, and in case such physicians shall certify in writing that they have separately examined such child and that in their opinion such child is at least fourteen years of age such officer shall accept such certificates as sufficient proof of the age of such child for the purposes of this section. In case the opinions of such physicians do not concur, the child shall be examined by a third physician and the concurring opinions shall be conclusive for the purpose of this section as to the age of the child.

Such officer shall require the evidence of age specified in subdivision (a) in preference to that specified in any subsequent subdivision and shall not accept the evidence of age permitted by any subsequent subdivision unless he shall receive and file in addition thereto an affidavit of the parent showing that no evidence of age specified in any preceding subdivision or subdivisions of this section can be produced. Such affidavit shall contain the age, place and date of birth, and present residence of such child, which affidavit must be taken before the officer issuing the employment certificate, who is hereby authorized and required to administer such oath and who shall not demand or receive a fee therefor. Such employment certificate shall not be issued until such child further has personally appeared before and been examined by the officer issuing the certificate, and until such officer shall, after making such examination, sign and file in his office a statement that the child can read and legibly write

simple sentences in the English language and that in his opinion the child is fourteen years of age or upwards and has reached the normal development of a child of its age, and is in sound health and is physically able to perform the work which it intends to do. Every such employment certificate shall be signed, in the presence of the officer issuing the same, by the child in whose name it is issued. In every case, before an employment certificate is issued, such physical fitness shall be determined by a medical officer of the department or board of health, who shall make a thorough physical examination of the child and record the result thereof on a blank to be furnished for the purpose by the State [industrial commission] and shall set forth thereon such facts concerning the physical condition and history of the child as the [industrial commission] may require. [C L 1909 v 3 Labor C 31 art 6 s 71 as amended by 1912 C 333]

Court decision.—Employment of a child between 14 and 16 in violation of the two preceding sections is negligence. The child can not be guilty of contributory negligence or assume the risks of employment.—*Dragotto v. Plunkett*, 99 N. Y. 361, 113 App. Div. 648 (1906).

Opinion.—The requirement of an examination as to physical fitness is of State-wide application and is not limited to cities of the first class. Attorney General (1912).

Contents of certificate.—Such certificate shall state the date and place of birth of the child, and describe the color of the hair and eyes, the height and weight and any distinguishing facial marks of such child, and that the papers required by the preceding section have been duly examined, approved and filed and that the child named in such certificate has appeared before the officer signing the certificate and been examined. [C L 1909 v 3 Labor C 31 art 6 s 72]

Contents of school record; educational requirements.—The school record required by this article shall be signed by the principal or chief executive officer of the school which such child has attended and shall be furnished, on demand, to a child entitled thereto or to the board, department or commissioner of health. It shall contain a statement certifying that the child has regularly attended the public schools or schools equivalent thereto, or parochial schools, for not less than one hundred and thirty days during the twelve months next preceding his fourteenth birthday, or during the twelve months next preceding his application for such school record and is able to read and write simple sentences in the English language, and has received during such period instruction in reading, spelling, writing, English grammar and geography and is familiar with the fundamental operations of arithmetic up to and including fractions and has completed the work prescribed for the first six years of the public elementary school or school equivalent thereto or parochial school from which such school record is issued. Such school record shall also give the date of birth and residence of the child as shown on the records of the school and the name of its parent or guardian or custodian. [C L 1909 v 3 Labor C 31 art 6 s 73 as amended by 1913 C 144]

Enforcement: duties and powers of industrial commission; list of certificates to be sent to industrial commission; blank certificates, etc.—The board or department of health or health commissioner of a city, village or town, shall transmit, between the first and tenth day of each month, to the [industrial commission], a list of the names of all children to whom certificates have been issued during the preceding month together with a duplicate of the record of every examination as to the physical fitness, including examinations resulting in rejection. In cities of the first and second class all employment certificates and school records required under the provisions of this chapter shall be in such form as shall be approved by the [industrial commission]. In towns, villages or cities other than cities of the first or second class, the [industrial commission] shall prepare and furnish blank forms for such employment certificates and school records. No school record or employment certificate required by this article, other than those approved or furnished by the [industrial commission] as above provided, shall be used. The [industrial commission] shall inquire into the administration and enforcement of the provisions of this article by all public officers charged with the duty of issuing employment certificates, and for that purpose the [industrial commission] shall have access to all papers and records required to be kept by all such officers. [C L 1909 v 3 Labor C 31 art 6 s 75 as amended by 1913 C 144]

Lists required under 16; certificates to be returned to child or parent; evidence of age may be required for child apparently under 16; false statement a misdemeanor; evidence of illegal employment.—Each person owning or operating a factory and employing children therein shall keep, or cause to be kept in the office of such factory, a register, in which shall be recorded the name, birthplace, age and place of residence of all children so employed under the age of sixteen years. Such register and the certificate filed in such office shall be produced for inspection upon the demand of the [industrial commission]. On termination of the employment of a child so registered, and whose certifi-

cate is so filed, such certificate shall be forthwith surrendered by the employer to the child or its parent or guardian or custodian. The [industrial commission] may make demand on any employer in whose factory a child apparently under the age of sixteen years is employed or permitted or suffered to work, and whose employment certificate is not then filed as required by this article, that such employer shall either furnish [it] within ten days, evidence satisfactory to [it] that such child is in fact over sixteen years of age, or shall cease to employ or permit or suffer such child to work in such factory. The [industrial commission] may require from such employer the same evidence of age of such child as is required on the issuance of an employment certificate; and the employer furnishing such evidence shall not be required to furnish any further evidence of the age of the child. A notice embodying such demand may be served on such employer personally or may be sent by mail addressed to him at said factory, and if served by post shall be deemed to have been served at the time when the letter containing the same would be delivered in the ordinary course of the post. When the employer is a corporation such notice may be served either personally upon an officer of such corporation, or by sending it by post addressed to the office or the principal place of business of such corporation. The papers constituting such evidence of age furnished by the employer in response to such demand shall be filed with the [industrial commission] and a material false statement made in any such paper or affidavit by any person, shall be a misdemeanor.¹ In case such employer shall fail to produce and deliver to the [industrial commission] within ten days after such demand such evidence of age herein required by [it], and shall thereafter continue to employ such child or permit or suffer such child to work in such factory, proof of the giving of such notice and of such failure to produce and file such evidence shall be prima facie evidence in any prosecution brought for a violation of this article that such child is under sixteen years of age and is unlawfully employed. [C L 1909 v 3 Labor C 31 art 6 s 76]

Certificates of physical fitness may be required from 14 to 16; revocation of employment certificates.—1. All children between fourteen and sixteen years of age employed in factories shall submit to a physical examination whenever required by a medical inspector of the State department of labor. The result of all such physical examinations shall be recorded on blanks furnished for that purpose by the [industrial commission], and shall be kept on file in such office or offices of the department as the [industrial commission] may designate.

2. If any such child shall fail to submit to such physical examination, the [industrial commission] may issue an order canceling such child's employment certificate. Such order shall be served upon the employer of such child who shall forthwith deliver to an authorized representative of the department of labor the child's employment certificate. A certified copy of the order of cancellation shall be served on the board of health or other local authority that issued the said certificate. No such child whose employment certificate has been canceled, as aforesaid, shall, while said cancellation remains unrevoked, be permitted or suffered to work in any factory of the State before it attains the age of sixteen years. If thereafter such child shall submit to the physical examination required, the [industrial commission] may issue an order revoking the cancellation of the employment certificate and may return the employment certificate to such child. Copies of the order of revocation shall be served upon the former employer of the child and the local board of health as aforesaid.

3. If as a result of the physical examination made by a medical inspector it appears that the child is physically unfit to be employed in a factory, such medical inspector shall forthwith submit a report to that effect to the [industrial commission] which shall be kept on file in the office of the [industrial commission], setting forth in detail his reasons therefor, and the [industrial commission] may issue an order canceling the employment certificate of such child. Such order of cancellation shall be served, and the child's employment certificate delivered up, as provided in subdivision two hereof, and no such child while the said order of cancellation remains unrevoked shall be permitted or suffered to work in any factory of the State before it attains the age of sixteen years. If upon a subsequent physical examination of the child by a medical inspector of the department of labor it appears that the physical infirmities have been removed, such medical inspector shall certify to that effect to the [industrial commission], and the [industrial commission] may thereupon make an order revoking the cancellation of the employment certificate and may return the certificate to such child. The order of revocation shall be served in the manner provided in subdivision two hereof. [C L 1909 v 3 Labor C 31 art 6 s 76-a as added by 1913 C 200]

¹ For penalty for misdemeanor, see page 121 (Consolidated Laws 1909, volume 4, Penal, chapter 40, article 174, section 1937).

EDUCATIONAL REQUIREMENTS.

COMPULSORY SCHOOL ATTENDANCE.

Enforcement: lists of alien children to be procured by industrial commission.—

* * * * *
2. The [industrial commission] shall procure with the consent of the Federal authorities complete lists giving the names, ages, and destination within the State of all alien children of school age, and such other facts as will tend to identify them, and shall forthwith deliver copies of such lists to the commissioner of education or the several boards of education and school boards in the respective localities within the State to which said children shall be destined, to aid in the enforcement of the provisions of the education law relative to the compulsory attendance at school of children of school age. [C L 1909 v 3 Labor C 31 art 11 (as renumbered by 1913 C 145) s 153 as added by 1910 C 514 and amended by 1912 C 543]

MERCANTILE ESTABLISHMENTS, THEATERS, STREET TRADES, MESSENGERS, ETC.

APPLICATION OF ACT.

Certain cities.—The provisions of this article shall apply to all villages and cities which at the last preceding State enumeration had a population of three thousand or more. [C L 1909 v 3 Labor C 31 art 12 (as renumbered by 1913 C 145) s 160]

MINIMUM AGE AND EMPLOYMENT CERTIFICATES AND RECORDS.

Employment under 14 prohibited; certificates required from 14 to 16.—No child under the age of fourteen years shall be employed or permitted to work in or in connection with any mercantile or other business or establishment specified in the preceding section [mercantile establishment, business office, telegraph office, restaurant, hotel, apartment house, theater or other place of amusement, bowling alley, barber shop, shoe-polishing establishment, or in the distribution or transmission of merchandise, articles or messages, or in the distribution or sale of articles]. No child under the age of sixteen years shall be so employed or permitted to work unless an employment certificate, issued as provided in this article, shall have been theretofore filed in the office of the employer at the place of employment of such child. [C L 1909 v 3 Labor C 31 art 12 (as renumbered by 1913 C 145) s 162 as amended by 1911 C 866]

Commissioner of health to issue certificates; age, school, and health records required; method of issuing.—[This section is practically identical with section 71, article 6 of this chapter.] [C L 1909 v 3 Labor C 31 art 12 (as renumbered by 1913 C 145) s 163 as amended by 1913 C 144]

Contents of certificates.—[This section is practically identical with section 72, article 6 of this chapter.] [C L 1909 v 3 Labor C 31 art 12 (as renumbered by 1913 C 145) s 164]

Contents of school records; educational requirements.—[This section is practically identical with section 73, article 6 of this chapter.] [C L 1909 v 3 Labor C 31 art 12 (as renumbered by 1913 C 145) s 165 as amended by 1913 C 144]

Enforcement: duties and powers of industrial commission; lists of certificates to be sent to industrial commission; blank certificates, etc.—[This section is practically identical with section 75, article 6 of this chapter.] [C L 1909 v 3 Labor C 31 art 12 (as renumbered by 1913 C 145) s 166 as added by 1913 C 144]

Lists required under 16; certificates to be returned to child or parent; evidence of age may be required for child apparently under 16; false statement a misdemeanor; evidence of illegal employment.—[This section is practically identical with section 76, article 6 of this chapter, except that in section 76 the provisions are enforced by the [industrial commission] and in this section by the [industrial commission] in cities of the first and second classes and by the health officers in other cities, villages, etc.] [C L 1909 v 3 Labor C 31 art 12 (as renumbered by 1913 C 145) s 167 as amended by 1913 C 145]

ALL REGULATED OCCUPATIONS.

ENFORCEMENT.

Duties and powers of industrial commission, health commissioners, etc.—Except in cities of the first and second class the board or department of health or health commissioners of a town, village or city affected by this article shall enforce the same

and prosecute all violations thereof. Proceedings to prosecute such violations must be begun within sixty days after the alleged offense was committed. All officers and members of such boards or department[s], all health commissioners, inspectors and other persons appointed or designated by such boards, departments or commissioners may visit and inspect, at reasonable hours and when practicable and necessary, all mercantile or other establishments herein specified within the town, village or city for which they are appointed. No person shall interfere with or prevent any such officer from making such visitations and inspections, nor shall he be obstructed or injured by force or otherwise while in the performance of his duties. All persons connected with any such mercantile or other establishment herein specified shall properly answer all questions asked by such officer or inspector in reference to any of the provisions of this article. In cities of the first and second class the [industrial commission] shall enforce the provisions of this article, and for that purpose [said commission] and [its] subordinates shall possess all powers herein conferred upon town, village, or city boards and departments of health and their commissioners, inspectors, and other officers, except that the board or department of health of said cities of the first and second class shall continue to issue employment certificates as provided in section one hundred and sixty-three of this chapter. [C L 1909 v 3 Labor C 31 art 12 (as renumbered by 1913 C 145) s 172 as amended by 1913 C 145]

Copy of law to be posted under certain conditions.—A copy or abstract of applicable provisions of this chapter and of the rules and regulations of the [industrial commission] to be prepared and furnished by the [industrial commission] shall be kept posted by the employer in a conspicuous place on each floor of every mercantile or other establishment specified in article twelve of this chapter situated in cities of the first or second class, wherein three or more persons are employed who are affected by such provisions. [C L 1909 v 3 Labor C 31 art 12 (as renumbered by 1913 C 145) s 173 as amended by 1913 C 145]

EDUCATIONAL REQUIREMENTS.

COMPULSORY SCHOOL AND EVENING AND CONTINUATION SCHOOL ATTENDANCE.

Instruction required.—The instruction required under this article shall be:

1. At a public school in which at least the six common school branches of reading, spelling, writing, arithmetic, English language and geography are taught in English.
2. Elsewhere than a public school upon instruction in the same subjects taught in English by a competent teacher. [C L 1910 v 8 Education C 16 art 23 s 620]

Children from 7 to 14 in certain cities, from 8 to 14 in certain other cities, and from 14 to 16 if not regularly and lawfully employed.—1. Every child within the compulsory school ages, in proper physical and mental condition to attend school, residing in a city or school district having a population of five thousand or more and employing a superintendent of schools, shall regularly attend upon instruction as follows:

(a) Each child between seven and fourteen years of age shall attend the entire time during which the school attended is in session, which period shall be not less than one hundred and sixty days of actual school.

(b) Each child between fourteen and sixteen years of age not regularly and lawfully engaged in any useful employment or service, and to whom an employment certificate has not been duly issued under the provisions of the labor law, shall so attend the entire time during which the school attended is in session.

2. Every such child, residing elsewhere than in a city or school district having a population of five thousand or more and employing a superintendent of schools, shall attend upon instruction during the entire time that the school in the district shall be in session as follows:

(a) Each child between eight and fourteen years of age.

(b) Each child between fourteen and sixteen years of age not regularly and lawfully engaged in any useful employment or service. * * * [C L 1910 v 8 Education C 16 art 23 s 621 as amended by 1911 C 710 and by 1913 C 511]

Boys from 14 to 16 to attend evening or continuation schools and girls from 14 to 16 to attend continuation schools under certain conditions.—1. Every boy between fourteen and sixteen years of age, in a city of the first class or a city of the second class in possession of an employment certificate duly issued under the provisions of the labor law, who has not completed such course of study as is required for graduation from the elementary public schools of such city, and who does not hold either a certificate of graduation from the public elementary school or the preacademic certificate issued by the regents or the certificate of the completion of an elementary course issued by the education department, shall attend the public evening schools of such city, or

other evening schools offering an equivalent course of instruction, for not less than six hours each week, for a period of not less than sixteen weeks.

2. When the board of education in a city or district shall have established part-time and continuation schools or courses of instruction for the education of young persons between fourteen and sixteen years of age who are regularly employed in such city or district, said board of education may require the attendance in such schools or on such courses of instruction of any young person in such a city or district who is in possession of an employment certificate duly issued under the provisions of the labor law, who has not completed such courses of study as are required for graduation from the elementary public schools of such city or district, or equivalent courses of study in parochial or other elementary schools, who does not hold either a certificate of graduation from the public elementary school or a preacademic certificate of the completion of the elementary course issued by the education department, and who is not otherwise receiving instruction approved by the board of education as equivalent to that provided for in the schools and courses of instruction established under the provisions of this act. The required attendance provided for in this paragraph shall be for a total of not less than thirty-six weeks per year, at the rate of not less than four and not more than eight hours per week, and shall be between the hours of eight o'clock in the morning and five o'clock in the afternoon of any working day or days.

3. The children attending such part-time or continuation schools as required in paragraph two of this section shall be exempt from the attendance on evening schools required in paragraph one of this section. [C L 1910 v 8 Education C 16 art 23 s 622 as amended by 1913 C 748]

Regulations for attendance at other than public schools.—If any such child shall so attend upon instruction elsewhere than at a public school, such instruction shall be at least substantially equivalent to the instruction given to children of like age at the public school of the city or district in which such child resides; and such attendance shall be for at least as many hours each day thereof as are required of children of like age at public schools; and no greater total amount of holidays and vacations shall be deducted from such attendance during the period such attendance is required than is allowed in such public schools to children of like age. Occasional absences from such attendance, not amounting to irregular attendance in the fair meaning of the term, shall be allowed upon such excuses only as would be allowed in like cases by the general rules and practice of such public school. [C L 1910 v 8 Education C 16 art 23 s 623]

Children from 7 to 14 in certain districts and from 14 to 16 unless regularly and lawfully employed; from 8 to 16 in other districts, unless regularly and lawfully employed, etc.—Every person in parental relation to a child within the compulsory school ages and in proper physical and mental condition to attend school, shall cause such child to attend upon instruction, as follows:

1. In cities and school districts having a population of five thousand or above, every child between seven and sixteen years of age as required by section six hundred and twenty-one of this act unless an employment certificate shall have been duly issued to such child under the provisions of the labor law and he is regularly employed thereunder.

2. Elsewhere than in a city or school district having a population of five thousand or above, every child between eight and sixteen years of age, unless such child shall have received an employment certificate duly issued under the provisions of the labor law and is regularly employed thereunder in a factory or mercantile establishment, business or telegraph office, restaurant, hotel, apartment house or in the distribution or transmission of merchandise or messages, or unless such child shall have received the school record certificate issued under section six hundred and thirty of this act and is regularly employed elsewhere than in the factory or mercantile establishment, business or telegraph office, restaurant, hotel, apartment house or in the distribution or transmission of merchandise or messages. [C L 1910 v 8 Education C 16 art 23 s 624]

Penalty for preceding section.—A violation of section six hundred and twenty-four shall be a misdemeanor, punishable for the first offense by a fine not exceeding five dollars, or five days' imprisonment, and for each subsequent offense by a fine not exceeding fifty dollars, or by imprisonment not exceeding thirty days, or by both such fine and imprisonment. * * * [C L 1910 v 8 Education C 16 art 23 s 625]

ALL OCCUPATIONS—EDUCATIONAL REQUIREMENTS.

MINIMUM AGE AND EMPLOYMENT CERTIFICATES.

Employment under 14 prohibited during school hours; employment and school record certificates required from 14 to 16 for employment in certain occupations elsewhere than in cities of the first and second class; employment certificates required from 14 to 16 in cities of the first and second class.—It shall be unlawful for any person, firm or corporation:

1. To employ [employ] any child under fourteen years of age, in any business or service whatever, for any part of the term during which the public schools of the district or city in which the child resides are in session.

2. To employ, elsewhere than in a city of the first class or a city of the second class, in a factory or mercantile establishment, business or telegraph office, restaurant, hotel, apartment house or in the distribution or transmission of merchandise or messages, any child between fourteen and sixteen years of age who does not at the time of such employment present an employment certificate duly issued under the provisions of the labor law, or to employ any such child in any other capacity who does not at the time of such employment present a school record certificate as provided in section six hundred and thirty of this chapter.

3. To employ any child between fourteen and sixteen years of age in a city of the first class or a city of the second class who does not, at the time of such employment, present an employment certificate, duly issued under the provisions of the labor law. [C L 1910 v 8 Education C 16 art 23 s 626]

NOTE.—[The provisions for employment certificates as provided for in this article are apparently superseded by articles 6 and 12, chapter 31, volume 3, Labor, Consolidated Laws 1909.]

Certificates to be displayed from 14 to 16.—The employer of any child between fourteen and sixteen years of age in a city or district shall keep and shall display in the place where such child is employed, the employment certificate and also his evening, part-time or continuation school certificate issued by the school authorities of said city or district or by an authorized representative of such school authorities, certifying that the said child is regularly in attendance at an evening, part-time or continuation school of said city as provided in section six hundred and thirty-one of this chapter. [C L 1910 v 8 Education C 16 art 23 s 627 as amended by 1913 C 748]

Penalty for illegal employment.—Any person, firm, or corporation, or any officer, manager, superintendent or employee acting therefor, who shall employ any child contrary to the provisions of sections six hundred and twenty-six and six hundred and twenty-seven hereof shall be guilty of a misdemeanor, and the punishment therefor shall be for the first offense a fine of not less than twenty dollars nor more than fifty dollars; for a second and each subsequent offense, a fine of not less than fifty dollars nor more than two hundred dollars. [C L 1910 v 8 Education C 16 art 23 s 628 as amended by 1913 C 748]

Court decision.—The section of which this is an amendment was held constitutional.—City of New York v. Chelsea Jute Mills, 43 Misc. 266, 88 N. Y. S. 1065 (1904).

COMPULSORY SCHOOL ATTENDANCE.

Enforcement: duties of teachers; misdemeanor.—An accurate record of the attendance of all children between seven and sixteen years of age shall be kept by the teacher of every school, showing each day by the year, month, day of the month and day of the week, such attendance, and the number of hours in each day thereof; and each teacher upon whose instruction any such child shall attend elsewhere than at school, shall keep a like record of such attendance. Such record shall, at all times, be open to the attendance officers or other person duly authorized by the school authorities of the city or district, who may inspect or copy the same; and every such teacher shall fully answer all inquiries lawfully made by such authorities, inspectors, or other persons, and a willful neglect or refusal so to answer any such inquiry shall be a misdemeanor.¹ [C L 1910 v 8 Education C 16 art 23 s 629]

SCHOOL-RECORD CERTIFICATES.

School authorities to issue certificates; contents of certificate.—1. A school-record certificate shall contain a statement certifying that a child has regularly attended the public schools, or schools equivalent thereto, or parochial schools, for not less than one hundred and thirty days during the twelve months next preceding his fourteenth birthday or during the twelve months next preceding his application for such school record, and that he is able to read and write simple sentences in the English language and has received during such period instruction in reading, writing, spelling, English grammar and geography and is familiar with the fundamental operations of arithmetic up to and including fractions, and has completed the work prescribed for the first six years of the public elementary school, or school equivalent thereto, or parochial school, from which such school record is issued. Such record shall also give the date of birth and residence of the child, as shown on the school records, and the name of the child's parents, guardian or custodian.

¹ For penalty for misdemeanor, see p. 131 (Consolidated Laws 1909, volume 4, Penal, chapter 40, article 174, section 1937).

2. A teacher or superintendent to whom application shall be made for a school-record certificate required under the provisions of the labor law shall issue a school-record certificate to any child who, after due investigation and examination, may be found to be entitled to the same as follows:

- a. In a city of the first class by the principal or chief executive of a school.
- b. In all other cities and in school districts having a population of five thousand or more and employing a superintendent of schools, by the superintendent of schools only.
- c. In all other school districts by the principal teacher of the school.
- d. In each city or school district such certificate shall be furnished on demand to a child entitled thereto or to the board or commissioner of health. [C L 1910 v 8 Education C 16 art 23 s 630 as amended by 1913 C 101]

School authorities to issue evening or continuation school certificates; requirements for and contents of certificates.—The school authorities in a city or district, or officers designated by them, are hereby required to issue to each child lawfully in attendance at an evening, part-time or continuation school, an evening, part-time or continuation school certificate at least once in each month during the month said evening, part-time or continuation school is in session and at the close of the term of said evening, part-time or continuation school: *Provided*, That said child has been in attendance upon said evening school, for not less than six hours each week or upon said part-time or continuation school for not less than four hours each week, for such number of weeks as will, when taken in connection with the number of weeks such evening, part-time or continuation school respectively, shall be in session during the remainder of the current or calendar year, make up a total attendance on the part of said child in said evening school, of not less than six hours per week for a period of not less than sixteen weeks or in said part-time or continuation school, of not less than four hours per week for a period of not less than thirty-six weeks. Such certificate shall state fully the period of time which the child to whom it is issued was in attendance upon such evening, part-time or continuation school. [C L 1910 v 8 Education C 16 art 23 s 631 as amended by 1913 C 748]

ENFORCEMENT.

Duties and powers of attendance officers and superintendent of schools, etc.—1. The school authorities of each city, union free school district, or common school district whose limits include in whole or in part an incorporated village, shall appoint and may remove at pleasure one or more attendance officers of such city or district, and shall fix their compensation and may prescribe their duties not inconsistent with this article and make rules and regulations for the performance thereof; and the superintendent of schools shall supervise the enforcement of this article within such city or school district.

2. The town board of each town shall appoint, subject to the written approval of the school commissioner of the district, one or more attendance officers, whose jurisdiction shall extend over all school districts in said town, and which are not by this section otherwise provided for, and shall fix their compensation, which shall be a town charge; and such attendance officers, appointed by said board, shall be removable at the pleasure of the school commissioner in whose commissioner district such town is situated. [C L 1910 v 8 Education C 16 art 23 s 632]

Powers of truant officers.—

* * * * *

3. A truant officer in the performance of his duties may enter, during business hours, any factory, mercantile or other establishment within the city or school district in which he is appointed and shall be entitled to examine employment certificates or registry of children employed therein on demand. [C L 1910 v 8 Education C 16 art 23 s 633]

PENALTIES.

Hindering attendance officers, etc., a misdemeanor.—Any person interfering with an attendance officer in the lawful discharge of his duties and any person owning or operating a factory, mercantile or other establishment who shall refuse on demand to exhibit to such attendance officer the registry of the children employed or the employment certificate of such children shall be guilty of a misdemeanor.¹ [C L 1910 v 8 Education C 16 art 23 s 634]

School moneys may be withheld from cities and districts not enforcing law.—1. The commissioner of education shall supervise the enforcement of this law and he may withhold one-half of all public school moneys from any city or district, which, in his judg-

¹ For penalty for misdemeanor, see page 131 (Consolidated Laws 1909, volume 4, Penal, chapter 40, article 174, section 1937).

ment, willfully omits and refuses to enforce the provisions of this article, after due notice, so often and so long as such willful omission and refusal shall, in his judgment, continue. * * * [C L 1910 v 8 Education C 16 art 23 s 636]

SCHOOL CENSUS.

Enumeration of children from 4 to 18; duties of permanent census board in cities of the first class except New York.—A permanent census board is hereby established in each city of the first class, except the city of New York. In the city of New York provision shall be made by the board of education for taking a school census in connection with the work of enforcing the compulsory education law. Such permanent census board shall consist of the mayor, the superintendent of schools, the police commissioner or officer performing duties similar to those of a police commissioner. The mayor shall be the chairman of such board. Such board shall have power to make such rules and regulations as may be necessary to carry out the provisions of this article. Such board shall have power to appoint a secretary and such clerks and other employees as may be necessary to carry out the provisions of this article and to fix the salaries of the same. Such board shall ascertain through the police force, the residences and employments of all persons between the ages of four and eighteen years residing within such cities and shall report thereon from time to time to the school authorities of such cities. Under the regulations of such board, during the month of October, nineteen hundred and nine, it shall be the duty of the police commissioners in such cities of the first class to cause a census of the children of their respective cities to be taken. Thereafter such census shall be amended from day to day by the police, precinct by precinct, as changes of residence occur among the children of such cities within the ages prescribed in this article and as other persons come within the ages prescribed herein and as other persons within such ages shall become residents of such cities, so that said board shall always have on file a complete census of the names and residences of the children between such ages and of the persons in parental relation thereto. It shall be the duty of persons in parental relation to any child residing within the limits of said cities of the first class to report at the police station house of the precinct within which they severally reside, the following information:

1. Two weeks before any child becomes of the compulsory school age the name of such child, its residence, the name of the person or persons in parental relation thereto, and the name and location of the school to which such child is sent as a pupil.

2. In case a child of compulsory school age is for any cause removed from one school and sent to another school, or sent to work in accordance with the labor law, all the facts in relation thereto.

3. In case the residence of a child is removed from one police precinct to another police precinct, the new residence and the other facts required in the two preceding subdivisions.

4. In case a child between the ages of four and eighteen becomes a resident of one of said cities of the first class for the first time the residence and such other facts as the census board shall require. Such census shall include all persons between the ages of four and eighteen years, the day of the month and the year of the birth of each of such persons, their respective residences by street and number, the names of their parents or guardians, such information relating to illiteracy and to the enforcement of the law relating to child labor and compulsory education as the school authorities of the State and of such cities shall require and also such further information as such authorities shall require. [C L 1910 v 8 Education C 16 art 24 s 650 as amended by 1914 C 480]

Enumeration of children from 4 to 18 in New York City; duties of bureau of compulsory education, school census, and child welfare.—The board of education shall have power to establish a bureau of compulsory education, school census and child welfare and subject to the provisions of law and of this act, the said board shall have power to make by-laws, rules, regulations and prescribe forms for the proper performance of the duties of all persons employed in and under the direction of said bureau. On the nomination of the board of superintendents the board of education shall have power to appoint a director and an assistant director of the said bureau for a term of six years each, and such attendance officers, enumerators, clerks and other employees as may be necessary, and to fix their salaries within the proper appropriation; to assign a chief attendance officer, and one or more attendance officers as supervising attendance officers for such periods as may be prescribed in the by-laws of the board of education. No person shall be eligible for the position of director or of assistant director of the said bureau who has not one of the following qualifications: (a) Graduation from a college or university recognized by the University of the State of New

York, together with five years' experience in teaching or supervision since graduation. (b) A principal's license for any of the boroughs of the city of New York obtained as the result of an examination, together with ten years' experience in teaching or supervision. The director and assistant director shall be participants in the teachers' retirement fund under section ten hundred and ninety-two of the charter of the city of New York and be subject to its provisions. Attendance officers employed under the direction of the said bureau shall perform duties in connection with the enforcement of the compulsory education law, in the taking of a school census, and in connection with the employment of children under the labor law, and such other duties, not inconsistent with this act, as the director of the bureau or the board of education may prescribe. It shall be the duty of persons in parental relation to any child between the ages of four and eighteen years residing in the city of New York to give to the educational authorities of the district within which they severally reside, all the information prescribed in section six hundred and fifty of article twenty-four of the education law of the State relating to such child, and such other information as may be required. Persons in parental relation who withhold such information shall be liable to the penalty prescribed in section six hundred and fifty-three of article twenty-four of the education law of the State. It shall be the duty of attendance officers, acting as census enumerators, to collect the information prescribed in section six hundred and fifty of article twenty-four of the education law and such other information as the State commissioner of education or the board of education may require. The director of the bureau of compulsory education, school census and child welfare, herein established, shall, subject to the by-laws of the board of education and in its name, enforce the compulsory education law, direct attendance officers in their duty, commit and parole truant and delinquent children and proceed against those in parental relation in the manner provided in section six hundred and thirty-five of chapter one hundred and forty of the laws of nineteen hundred and ten as amended, any provision of the said law or of section ten hundred and seventy-eight of the charter of the city of New York to the contrary notwithstanding. The assistant director shall perform such duties in connection with the supervision of the school census, or otherwise, as the director, subject to the by-laws of the board of education, may prescribe. Under the direction of the board of education the city superintendent of schools shall have a general supervision of the bureau of compulsory education, school census and child welfare. On or about May first, nineteen hundred and fourteen, the board of education shall ascertain the information required by section six hundred and fifty of article twenty-four of the education law of the State relating to a census of all persons within the city of New York between the ages of four and eighteen years of age. Thereafter such census shall be amended from day to day by attendance officers, clerks and other employees under the supervision of the director, as changes of residence occur among children of such city within the ages prescribed in this article, and as other persons come within the ages prescribed, and as other persons within such ages shall become residents of such city, so that the said board of education in its census bureau shall always have on file a complete census of the names and residences of the children between such ages and of the persons in parental relation thereto. [Greater New York Charter 1901 C 461 s 1069 subdivision 8 as added by 1914 C 479]

Enumeration of children from 4 to 18; duties of permanent census board or school authorities in other than cities of the first class.—A permanent census board may be established in any city not of the first class, in accordance with the provisions of this article. If a census board shall not be established in such cities, then, during the month of October, nineteen hundred and nine, and in the month of October every fourth year thereafter, the school authorities of every city, not a city of the first class, shall take a census of the children of their respective cities. Such census shall include the information required from the cities of the first class as provided in section six hundred and fifty of this chapter. [C L 1910 v 8 Education C 16 art 24 s 651]

Enumeration of children from 5 to 18; duties of boards of trustees in school districts.—The board of trustees of every school district shall annually on the thirtieth day of August cause a census of all children between the ages of five and eighteen years to be taken in their respective school districts. Such census shall include the information required from cities as provided in this article. [C L 1910 v 8 Education C 16 art 24 s 652]

Penalty for false information, etc.—A parent, guardian or other person having under his control or charge a child between the ages of four and eighteen years who withholds or refuses to give information in his possession relating to such child and required under this article, or any such parent, guardian or other person who gives false information in relation thereto, shall be liable to and punished by fine not exceeding twenty dollars or by imprisonment not exceeding thirty days. [C L 1910 v 8 Education C 16 art 24 s 653]

ALL REGULATED OCCUPATIONS.

PENALTIES.

Violation of labor laws and false statements.—Any person who violates or does not comply with any provision of the labor law, any provision of the industrial code, any rule or regulation of the [industrial commission] * * * or any lawful order of the [industrial commission]; and any person who knowingly makes a false statement in or in relation to any application made for an employment certificate as to any matter required by articles six * * * of the labor law to appear in any affidavit, record, transcript or certificate therein provided for, is guilty of a misdemeanor and upon conviction shall be punished, except as in this chapter otherwise provided, for a first offense by a fine of not less than twenty nor more than fifty dollars; for a second offense by a fine of not less than fifty nor more than two hundred and fifty dollars, or by imprisonment for not more than thirty days or by both such fine and imprisonment; for a third offense by a fine of not less than two hundred and fifty dollars, or by imprisonment for not more than sixty days, or by both such fine and imprisonment. [C L 1909 v 4 Penal C 40 art 120 s 1275 as amended by 1913 C 349]

Misdemeanor.—A person convicted of a crime declared to be a misdemeanor, for which no other punishment is specially prescribed by this chapter, or by any other statutory provision in force at the time of the conviction and sentence, is punishable by imprisonment in a penitentiary, or county jail, for not more than one year, or by a fine of not more than five hundred dollars, or by both. [C L 1909 v 4 Penal C 40 art 174 s 1937]

AMENDMENTS TO EMPLOYMENT-CERTIFICATE LAW.

In effect Feb. 1, 1917.

[Acts of 1916, ch. 465, sec. 1, amending Labor Law, sec. 71. Section 2 of the same act amends Labor Law, sec. 163, to read exactly like section 71 as amended. Portions in brackets were in the original law but are omitted in the amendment; portions in italics were not in the original law but are added in the amendment.]

Employment certificate, how issued.—Such certificate shall be issued by the commissioner of health or the executive officer of the board or department of health of the city, town or village where such child resides[,] or is to be employed, or by such other officer thereof as may be designated by such board, department or commissioner for that purpose, upon the application of the parent [or], guardian or custodian of the child desiring such employment. Such officer shall not issue such certificate until he has received, examined, approved and filed the following papers duly executed, namely: The school record of such child properly filled out and signed as provided in this article; also, evidence of age showing that the child is fourteen years old or upwards, which shall consist of the evidence thereof provided in one of the following subdivisions of this section and which shall be required in the order herein designated as follows:

(a) Birth certificate[.]; *passport or baptismal certificate.* A duly attested transcript of the birth certificate filed according to law with a registrar of vital statistics or other officer charged with the duty of recording births[, which certificate shall be conclusive evidence of the age of such child.]; *or a passport; or a duly attested transcript of a certificate of baptism showing the date of birth of such child.*

(b) Certificate of graduation. A certificate of graduation duly issued to such child showing that such child is a graduate of a public school of the State of New York or elsewhere, having a course of not less than eight years, or of a school in the State of New York other than a public school, having a substantially equivalent course of study of not less than eight years' duration, in which a record of the attendance of such child has been kept as required by article twenty of the education law, provided that the record of such school shows such child to be at least fourteen years of age.

(c) Passport or baptismal certificate. A passport or a duly attested transcript of a certificate of baptism showing the date of birth and place of baptism of such child.]

[(d)] (b) Other documentary evidence. In case it shall appear to the satisfaction of the officer to whom application is made, as herein provided, for an employment certificate, that a child for whom such certificate is requested[, and who has presented the school record, is in fact over fourteen years of age, and that satisfactory documentary evidence of age can be produced, which does not fall within any of the provisions of the preceding subdivisions of this section, and that none of the papers mentioned in said subdivisions can be produced, then and not otherwise he shall present to the board of health of which he is an officer or agent, for its action thereon, a statement signed by him showing such facts, together with such [affidavits or] papers as may have been produced before him constituting such evidence [of the age of such child, and the board of health, at a regular meeting thereof, may then, by resolution, provide that such evidence of age shall be fully entered on the minutes of such board, and shall be received as sufficient evidence of the age of such child for the purpose of this section]. *The commissioner of health, or when officially authorized, the issuing officer of the board or department of health may then accept such evidence as sufficient as to the age of such child, and a record of such evidence shall be fully entered on the minutes of the board at the next meeting thereof.*

[(e)] (c) Physicians' certificates. In cities of the first class only, in case application for the issuance of an employment certificate shall be made to such officer by a child's parent, guardian or custodian who alleges his inability to produce any of the evidence of age specified in the preceding subdivisions of this section, and if the child is apparently at least fourteen years of age, such officer may receive and file an application signed by the parent, guardian or custodian of such child for physicians' certificates. Such application shall contain the alleged age, place and date of birth, and present residence of such child, together with such further facts as may be of assistance in determining the age of such child. Such application shall be filed for not less than [ninety] *sixty* days after date of such application for such physicians' certificates, for an examination to be made of the statements contained therein, and in case no facts

appear within such period or by such examination tending to discredit or contradict any material statement of such application, then and not otherwise the officer may direct such child to appear thereafter for physical examination before two physicians officially designated by the board of health, and in case such physicians shall certify in writing that they have separately examined such child and that in their opinion such child is at least fourteen years of age such officer shall accept such certificates as sufficient proof of the age of such child for the purposes of this section. In case the opinions of such physicians do not concur, the child shall be examined by a third physician and the concurring opinions shall be conclusive for the purpose of this section as to the age of such child.

Such officer shall require the evidence of age specified in subdivision (a) in preference to that specified in any subsequent subdivision and shall not accept the evidence of age permitted by any subsequent subdivision unless he shall receive and file in addition thereto an affidavit of the parent showing that no evidence of age specified in any preceding subdivision or subdivisions of this section can be produced. Such affidavit shall contain the age, place and date of birth, and present residence of such child, which affidavit must be taken before the officer issuing the employment certificate, who is hereby authorized and required to administer such oath and who shall not demand or receive a fee therefor.

Such employment certificate shall not be issued until such child further has personally appeared before and been examined by the officer issuing the certificate, and until such officer shall, after making such examination, sign and file in his office a statement that the child can read and [legibly] write *correctly* simple sentences in the English language and that in his opinion the child is fourteen years of age or upwards and has reached the normal development of a child of its age, and is in sound health and is physically able to perform the work which it intends to do. Every such employment certificate shall be signed, in the presence of the officer issuing the same, by the child in whose name it is issued. In every case, before an employment certificate is issued, such physical fitness shall be determined by a medical officer of the department or board of health, who shall make a thorough physical examination of the child and record the result thereof on a blank to be furnished for the purpose by the [State commissioner of labor] *industrial commission* and shall set forth thereon such facts concerning the physical condition and history of the child as the [commissioner of labor] *industrial commission* may require.

In case the evidence of age, filed as in this section provided, shows such child to be fourteen years old but fails to show such child to be fifteen years old, no employment certificate shall be issued unless such child, in addition to complying with all the requirements of this section and producing the school record described in section seventy-three, shall also present a certificate of graduation properly issued in the name of such child, from a public elementary school, or school equivalent thereto or parochial school, or a preacademic certificate issued by the regents, or a certificate of the completion of an elementary course issued by the education department.

FORMS USED IN THE ADMINISTRATION OF EMPLOYMENT-CERTIFICATE LAWS.

[The words in italics are as entered by hand on the blank forms, but all names and addresses, except those of some of the officials, are fictitious. Lines inclosed in brackets [] are interpolated and do not appear in the forms as used.]

[Form 1. See p. 13.]

UNIVERSITY OF THE STATE OF NEW YORK,
THE STATE DEPARTMENT OF EDUCATION.

SCHOOL RECORD.

To the Board of Health City of *Little Falls*:

GENTLEMEN: I hereby certify that *Rees Spence* was a pupil in *Lincoln* school in the city of *Little Falls*, State of *New York*; that her attendance at the said school was not less than 120 days during the 12 months next preceding her 14th birthday or the 12 months next preceding her application for a school-record certificate; that *she* is able to read and write simple sentences in the English language and received during such period instruction in English in reading, writing, spelling, English language and geography and is familiar with the fundamental operations of arithmetic up to and including fractions and has completed the work prescribed for the first six years of the public elementary school, or school equivalent thereto, or parochial school; that according to the records of the above-named school, said pupil was born on the *10th* day of *Sept.*, 1900, resides at *110 W. Main St.* in the city of *Little Falls* and the name of her parent, guardian, or custodian is *John Spence*.

[Signed] *JOHN DE LOVE*,
Superintendent, principal or chief executive officer of school.

(Dated) *Oct 12, 1914*.

This certificate when issued should be given to the child entitled to it, who should present it to the local board of health if an employment certificate is desired; otherwise it is to be retained by the child.

An exact record of all certificates issued shall be kept on file. Such record in part should contain the name, age and residence of each child to whom a certificate was granted, with the number of days' attendance credited to each within the period prescribed in the statute; also the date on which the certificate was issued.

Section 1275 of the penal law:

Any person who knowingly makes a false statement in or in relation to any application made for an employment certificate as to any matter required by articles 6 and 11 of the labor law to appear in any affidavit, record, transcript or certificate therein provided for, is guilty of a misdemeanor and upon conviction shall be punished for a first offense by a fine of not less than \$20 nor more than \$50; for a second offense by a fine of not less than \$50 nor more than \$250, or by imprisonment for not more than 30 days, or by both such fine and imprisonment; for a third offense by a fine of not less than \$250, or by imprisonment for not more than 60 days, or by both such fine and imprisonment.

JOHN HUSTON FINLEY,
President of the University.

Approved by State Department of Labor.

[Form 2a. See p. 31.]

This certificate is effective throughout the State and until the owner is 16 years of age unless sooner revoked.
No. *848*.

EMPLOYMENT CERTIFICATE.

Issued pursuant to sections 71 and 163 of the labor law of the State of New York, chapter 36, laws of 1908, as amended.

The Department of Health of *Syracuse, N. Y.*, upon application duly made pursuant to law, grants this certificate to *John Baker* and it is hereby certified that this child, who is described below, personally (Name of child.)

appeared before the undersigned official and was by him examined and found qualified for employment under the labor law; it is further certified that documentary evidence of the age and education of said child, as required by law, has been duly examined, approved, and made a part of the records of the above department, and that by careful examination the physical fitness of the said child has been determined by the medical examiner of the above department and that such physical examination has been recorded as required by law.

DESCRIPTION OF CHILD.

Place of birth *Utica, N. Y.*
Color of hair *Brown*.
Height *4 feet 6 inches*.
Distinguishing facial marks *none*.

Date of birth *June 21, 1900*.
Color of eyes *Blue*.
Weight *100*.

JOHN BAKER,
Signature of child named in the above certificate.

THE BOARD OF HEALTH.
By *F. W. SEARS*,
Signature of official issuing certificate.

Date *July 2, 1915*.

N. B.—This certificate must be filed with the employer, and must be kept on file in the office at the place of employment during the period of such employment. It shall be surrendered to the child, its parent, guardian, or custodian upon the termination of the child's employment.

(OVER)

[Form 2b. See p. 31.]

This certificate is effective throughout the State and until the owner is 16 years of age unless sooner revoked.

No. 7548.

EMPLOYMENT CERTIFICATE.

Issued pursuant to sections 71 and 163 of the labor law of the State of New York, chapter 36, Laws of 1909, as amended.

The Department of Health of City of New York, upon application duly made pursuant to law, grants this certificate to *Laurence Flynn* and it is hereby certified that this child, who is described below, personally appeared before the undersigned official and was by him examined and found qualified for employment under the labor law; it is further certified that documentary evidence of the age and education of said child, as required by law, has been duly examined, approved, and made a part of the records of the above department, and that by careful examination the physical fitness of the said child has been determined by the medical examiner of the above department and that such physical examination has been recorded as required by law.

DESCRIPTION OF CHILD.

Place of birth *Rochester, N. Y.*
Color of hair *Brown.*
Height *5 feet 5½ inches.*
Distinguishing physical marks ———.

Date of birth *Aug. 7, 1899.*
Color of eyes *Blue.*
Weight *103 lbs.*

sex *Male.*

THE BOARD OF HEALTH.

LAURENCE FLYNN

Signature of child named in the above certificate.

Address *173 W. 81st. St.*By *JOHN J. O'BRIEN,*

Signature of official issuing certificate.

Date *March 12, 1914.*

N. B.—This certificate must be filed with the employer, and must be kept on file in the office at the place of employment during the period of such employment. It shall be surrendered to the child, its parent, guardian, or custodian upon the termination of the child's employment.

(OVER)

[Forms 2a and 2b (reverse). See p. 31.]

IMPORTANT.

NOTICE TO EMPLOYERS.

Factories: In factories the child presenting this certificate shall not be permitted to work before 8 o'clock in the morning or after 5 o'clock in the afternoon, or for more than 8 hours in any one day or more than six days in any one week. (Section 77, Labor Law.)

Special attention is called to OCCUPATIONS at which children can not be employed, enumerated in section 93, Labor Law.

MERCANTILE ESTABLISHMENTS: In mercantile establishments the child presenting this certificate shall not be permitted to work before 8 o'clock in the morning or after 6 o'clock in the evening, or for more than 8 hours in any one day or more than six days in any one week. (Section 161, Labor Law.)

[Form 3. See p. 80.]

Thomas Blake.
Signature of child.

14 Pitt St.
Home address.

London, Eng., Nov. 10, 1896
Place and date of birth.

John & Mary Blake.
Father's and mother's name.

Packing.
Work actually engaged in.

<i>July 9, 1914.</i>	<i>\$5.</i>	<i>8½</i>
When employed.	Wages.	Daily hours.
<i>8</i>	<i>5</i>	<i>½</i>
Commence.	Stop work.	Noon day recess

Robt. Walton, foreman.
By whom employed.

National Cigar Co.
Business title of firm or company.

17 Monroe St.
Address.

J. K. Smith, supt. of factory.
Person in authority seen by deputy.

Nov. 3, 1914. *3 p. m.*
Date of inspection. Time of day.

J. C. Howard.
Factory inspector.

[Form 4. See p. 80.]

STATE OF NEW YORK,
[SEAL] DEPARTMENT OF LABOR,
BUREAU OF FACTORY INSPECTION.

Albany, April 13, 1914.

In accordance with the provisions of section 76 of chapter 36, Laws of 1909, as amended, you are hereby directed to furnish to this department, within ten days, proper evidence that the child named herein and who is now employed, permitted or suffered to work in your manufacturing establishment, is in fact over sixteen years of age: (For the kind of evidence that will be considered, see the back of this sheet.)

Name and address of child (as furnished to inspector at time of inspection).
Mary J. Dixon, 43 Williams Street.

Failing to furnish the evidence herein called for you must immediately cease to employ or permit or suffer such child to work in your factory.

(OVER)

M. LEWIS.
Chief Factory Inspector.

[Form 4 (reverse). See p. 80.]

Evidence herein called for shall consist of:

(a) Birth certificate: A duly attested transcript of the birth certificate filed according to law with a registrar of vital statistics or other officer charged with the duty of recording births, which certificate shall be conclusive evidence of the age of such child.

(b) Certificate of graduation: A certificate of graduation duly issued to such child showing that such child is a graduate of a public school of the State of New York or elsewhere, having a course of not less than eight years, or of a school in the State of New York other than a public school, having a substantially equivalent course of study of not less than eight years' duration, in which a record of the attendance of such child has been kept as required by the compulsory education law, provided that the record of such school shows such child to be over sixteen years of age.

(c) Passport or baptismal certificate: A passport or a duly attested transcript of a certificate of baptism showing the date of birth and place of baptism of such child.

(d) Other evidence: In cases where it is impossible to produce any one of the above-mentioned documents, there shall be sent to the commissioner of labor a duly acknowledged affidavit from the parent or guardian of said child; the affidavit shall state the name, residence, date, and place of birth of said child, and that none of the documentary evidence mentioned above can be produced. There shall also be submitted in connection therewith a further affidavit or affidavits, from at least two physicians, stating that after due examination they are of the opinion that said child is upwards of the age of sixteen years.

[Form 5. See p. 81.]

Insp. No. 436
Special.
Date 4/17/16.

Building file No. 348765.
Formerly.
Give old business title or address if changed in 12 months.
Name John Doe Co.
If unincorporated and operating under an assumed business title, also add name of proprietor.

F. I. { Reg. insp. No. 436 L. B.—S. B. No. 23.
Special.....Dist. No. 2-49.
Purpose of visit.

No. 265 Elm St. City or village N. Y. County N. Y. Boro. Man.
Front or rear.

Incorporated—President's name J. B. Jones Address 295 Monroe Ave., N. Y. C.

Owner, agent, or lessee of building George Blake Address 32 Wall St., N. Y. C.
No. of buildings 1 Stories 18
In entire plant. Building covered by this report. (Of bldg. insp.)

9th. Floors occupied. T. H. Sep. shop. Registered. Ten.—Factory.
Women's coats & suits. Coats.

Chief product manufactured or work done. Specific product of bldg. insp.

Wool. Principal raw material used. Work done outside factory.

9/14/15 Date of last inspection. James Green. Peter Spruce. Mgr.
By whom. Person in authority seen. His position.

Sex and age.	In office, messengers, etc.	Employees.				Hours.	
		In workshops.	Total.	On full days.	On short day.	Total per week.	Total per week.
M 18+.....		37	37	9	5	50	
M 16-18.....							
M 14-16.....							
F 21+.....		8	8	10	(9)	5	54
F 16-21.....		8	10	10	(9)	5	54
F 14-16.....		1	1	8	5	45	
Total.....		49	51	X	X	X	
C. under 14.....				X	X	X	
Largest no. in yr.		49	51	X	X	X	

SUMMARY REPORT AND CERTIFICATE OF INSPECTOR.

This is to certify that on careful inspection of the factory workrooms, conditions were found to be in substantial compliance with the law and Industrial Code rules, relative to subjects enumerated below, except where indicated in the negative, supplemented by orders on back of card.

Employment and hours of labor of children—Male minors—Women Yes. \$8-A Yes.

Health—Comfort—Ventilation—Sanitary conditions and conveniences No.

Guarding switchboards—Elevators—Machinery—Inspection of boilers No.

Work rooms: Lighting—Maintenance—Occupancy—Exits—Fire prevention Yes.

Rules: Special to foundries.....Special to milling industry

Posting: Laws—Rules—Schedules—Notices—Certificates—Permits No Meal time Yes Wages Yes.

Ten.—Factory—No. hor. exits 0 No. exit stairs 2 (394)

No. fire escapes 0 — No. elevators 2.
(Rule 380.)

Proprietors at work 0 Work in 1 shifts
Work nights? No. at work 37 On Sunday? 0 No. at work —

4/17/16 ROSE RICHARDS,
Date of inspection. Factory Inspector.

[Form 5 (reverse). See p. 81.]

Orders:

Post laws and hours of labor. Complied.

Prohibit the use of towels in common.

Provide a dressing room for the use of females, such room to have at least one window opening to the outer air and to be inclosed by means of solid partitions or walls and to contain at least sixty (60) square feet for the first ten (10) persons and an additional two (2) square feet for each person in excess of ten (10).

Provide at least two couches or beds in your factory for the use of females.

Whitewash walls of water-closet compartments used by males.

Orders on building card to owner.

Examined by G. G. H. 4/27/16. Notice sent 4/29/16.

Date.

Occ.—L. D.—C. L.—S. R.—I. H.—C. Card filed.

Name John Doe Co.
Address 265 Elm St., N. Y. C.

138 EMPLOYMENT-CERTIFICATE SYSTEM IN NEW YORK.

[Form 6. See p. 81.]

		Insp. No. Supv. Dist.	
		C. L.	S. I. Purpose of visit (if special).
Name <i>American Candy Co.</i> Or business title of firm or corporation.	Address <i>New York City.</i> City or village.		County.
Name and address <i>John Bruce.</i> Of person directly responsible for hiring children.	Superintendent. Relation to busi- ness.	Date of inspection. <i>Dec. 6, 1914.</i>	
Children under 14 years or without certificates.			
Name and address. <i>Bessie Jennings.</i>	Place of birth. <i>Jersey City, N. J.</i>	Date of birth. <i>Nov. 4, 1901.</i>	Work engaged in. <i>Packing.</i>
Statement of inspector. <i>Child stated she told employer she was over 16; child is small.</i>			
<i>A. J. GREEN, Inspector.</i>			
Children alleged to be over 16 but apparently under 16, employed without certificate.			
Name and address. <i>James Lanson.</i>	Place of birth. <i>N. Y. City.</i>	Alleged date of birth. <i>Mar. 4, 1896.</i>	Work engaged in. <i>Cleaning.</i>
<i>A. J. GREEN, Inspector.</i>			

Date notice mailed. Person mailing. Time. Place mailed. Evidence received. Examined by.

[Form 6 (reverse). See p. 81.]

[Both sides of this form are never used at the same time.]

		Insp. No. 127. Supv. Dist. 1-S.	
		I. H.	S. I. <i>A. 366.</i> Purpose of visit (if special).
Name <i>Jones & Smith.</i> Or business title of firm or corporation.	Address <i>145 Main St., N. Y.</i> City or village.		<i>N. Y.</i> County
Name and address <i>John Jones.</i> Of person directly responsible for fixing hours of labor of child.	Partner. Relation to business.		
Date of inspection <i>1/13/16.</i>		<i>5:30 p. m.</i>	
When child was found working illegal hours.		Hour and minute.	
Employed <i>over 8 hours daily—before 8 a. m.—after 5 p. m.</i>		Certificate filed. Prohib. employment	
Name and address <i>Mary Brown, 68 Howe St., N. Y. C.</i>	<i>9</i>	<i>8 a. m.</i>	<i>6 p. m.</i>
Of child found at work.	Daily hours.	Commence work.	Stop work.
<i>60 m.</i>			
Noonday recess.			
<i>I found Mary Brown, who will be 16 yrs. old Sept. 13, '16, employed at 5:30 p. m. cleaning chocolate pans.</i>			
Subsequent visit (within 48 hours, if violation was not clearly established at time of inspection).			
Date.	Hour and minute.	Violation continued.	Evidence secured.
Of reinvestigation.			
Person in authority seen.	Date referred to counsel.		
Remarks.			
<i>A. J. GREEN, Inspector.</i>			
Statement of counsel: <i>Prosecution begun.</i>			
Report on children employed illegal hours.		<i>Adolph Rutgers.</i> Counsel.	<i>2/3/16.</i> Date.

[New York City Form 1. See p. 23.]

Name *Belisario Mantilli.*
Address *229 E. 144th St.*
New York *Dec. 12, 1915.*
Application for an employment certificate.

DEPARTMENT OF HEALTH
BUREAU OF CHILD HYGIENE

Passport.

[On margin:]
M 4337.

FORMS USED IN ADMINISTRATION.

139

[New York City Form 2. See p. 28.]

DEPARTMENT OF HEALTH,
OF THE CITY OF NEW YORK,
DIVISION OF CHILD HYGIENE.

STATE OF NEW YORK,
CITY OF NEW YORK, ss:
COUNTY OF QUEENS }

Marie Klein, being duly sworn, deposes and says that she resides at No. 47 Stockholm Street, New York City, and is the parent of *Mary Klein*, that she is unable to accompany said child to the office of the Department of Health, and hereby authorizes *Anna Klein* to act as custodian of said child in obtaining her employment certificate.

MARIE KLEIN.

(Witnesses, if signature is by mark "X.")

.....
Name of Witness.

.....
Address of Witness.

.....
Name of Witness.

.....
Address of Witness.

Subscribed and sworn to, before me,
this 5th day of April 1914
[Seal.]

AUGUST SELLARS,
Notary Public,
#3438 N. Y. County.

(If this affidavit is made by mark "X," there must be two witnesses to the mark "X," and each witness must sign his or her name and state his or her address directly beneath his or her name.)

[New York City Form 3. See p. 23.]

STATEMENT OF PERSON SIGNING APPLICATION FOR EMPLOYMENT CERTIFICATE.

I *Sarah Small* residing at 1245 George St., Manhattan having been duly sworn, depose and say that in the case of *Harry James* applying for an employment certificate this day, his mother is dead and his father is *in Idaho* and that he is residing with me for the year.

I furthermore depose and say that under these circumstances, I am acting in the capacity as guardian of said *Harry James*.

Subscribed and sworn to, before me, this 12th day of March, 1915.

J. V. MANN.

[New York City Form 4. See p. 24.]

DEPARTMENT OF HEALTH,
OF THE CITY OF NEW YORK,
BUREAU OF RECORDS.

Borough of Manhattan.
No. of certificate 17469.

This is to certify that

John P. Wallace

was born on Jan. 18, 1899, according to the records of this department.

SHIRLEY W. WYNN, M. D.,
Assistant Registrar.

Mar. 26, 1914.

[New York City Form 5. See p. 24.]

DEPARTMENT OF HEALTH,
THE CITY OF NEW YORK,
BUREAU OF RECORDS.

Borough of Manhattan.

This is to certify that a search has been made of the records of birth of this borough and the name of *George A. Halley*, said to have been born Feb. 19, 1900, has not been found.

SHIRLEY W. WYNN, M. D.,
Assistant Registrar.

April 4, 1914.

[New York City Form 6. See p. 24.]

SCHOOL RECORD.

To the Board of Health of the Department of Health of the City of New York.

Gentlemen:

THIS IS TO CERTIFY THAT *George Kelley* of No. 4 *Madison St.*, has attended school No. *St. Agnes School* situated at No. 153 *E. 15 Street* in the Borough of *Man.*, City of New York, 140 days during the twelve months next preceding his fourteenth birthday (or next preceding its application for this school record); and that said child is able to read and write simple sentences in the English language, and has received during such period instruction in reading, spelling, writing, English grammar and geography, is familiar with the fundamental operations of arithmetic up to an including fractions, and has completed the work prescribed for the first six years of the public elementary schools, or school equivalent thereto, or parochial schools.

The school record gives the date of birth of said child as *Sept. 30, 1899*; name of parent (guardian or custodian) *John Kelley*.

Dated, *Mar. 4, 1914.*

SISTER MARY ANTOINETTE.

Signature of principal or chief executive officer of the school.

(The law requires the school record to be signed by the principal or chief executive officer of the school and it must be furnished to any child who after due examination and investigation may be entitled thereto. The school record must contain, among other things, a statement certifying that the child has regularly attended the public schools or schools equivalent thereto, or parochial schools, for not less than 120 days during the twelve months next preceding his fourteenth birthday, or during the twelve months next preceding its application for this school record.)

Section 344 of the Penal Code makes it a misdemeanor for any person to make a false statement in or in relation to any application for an employment certificate.)

THIS IS NOT A PERMIT TO WORK.

[New York City Form 7. See p. 24.]

DEPARTMENT OF EDUCATION,
THE CITY OF NEW YORK.
Borough of *Man.*,
Date *May 19, 1914.*

To the Board of Health, the City of New York.

I HEREBY CERTIFY THAT *Charles Willey*, residing at *77 Madison St.*, in the City of New York has attended—

P. S. No. 5 Dist. 7 Borough 160 days.....	Principal.
.....Dist.....Borough.....days.....	Principal.
.....Dist.....Borough.....days.....	Principal.
.....Dist.....Borough.....days.....	Principal.

An aggregate of 160 days during the twelve months next preceding his fourteenth birthday, or during the twelve months next preceding the date of this certificate; that said child is able to read and write simple sentences in the English language and has received instruction during such period in reading, spelling, writing, English grammar, and geography, and is familiar with the fundamental operations of arithmetic up to and including fractions, and has completed the work prescribed for the first six years of the public elementary school or school equivalent thereto, or parochial school; and is in the 7A grade and furthermore, that said child, according to the records of above-named school, was born on *Jan. 10, 1899*, and that its parent, guardian, or custodian is *Henry Willey*.

MARY BRUCH,
Principal.

Results of academic examination conducted by district superintendent.

On *May 4, 1914.*

Arithmetic, B.
English, C.
(Written composition.)

Writing from dictation, C.
Oral reading, B.

(Signed) MARY BRUCH.

Principal, P. S. No. 5.

Penal Law—Art. 120—Sec. 1275—Subd. 8.

"Any person who makes a false statement in or in any relation to any application made for an employment certificate as to any matter required by Articles 6 and 11 of the Labor Law to appear in any affidavit, record, transcript, or certificate therein provided for, is guilty of a misdemeanor and upon conviction shall be punished for a first offense by a fine of not less than twenty nor more than fifty dollars; for a second offense by a fine of not less than fifty nor more than two hundred dollars, or by imprisonment for not more than thirty days, or by both such fine and imprisonment; for a third offense by a fine of not less than two hundred and fifty dollars, or by imprisonment for not more than sixty days, or by both such fine and imprisonment."

NOTE.—This is a certificate of school attendance only. A permit to work must be obtained from the board of health.

A school certificate must not be issued to any child under fourteen years of age, or in any grade lower than 7A (seventh year, first half.)

[New York City Form 8. See p. 25.]

DEPARTMENT OF HEALTH, THE CITY OF NEW YORK,
BOROUGH OF MANHATTAN, 149 CENTRE STREET.

APPLICATION AND AFFIDAVIT FOR EMPLOYMENT CERTIFICATE.

STATE OF NEW YORK, CITY OF NEW YORK, COUNTY OF N. Y. ss.:

Abraham Goldstein being duly sworn, deposes and says: That he is the applicant above named, and resides at No. 125 E. 80th St., in the City of New York, Borough of Man.; that deponent is the parent, guardian, custodian of *Isidore Goldstein* and hereby makes application for an employment certificate

Name of child.
to be issued in the name of said child; that the said child was born at *Russia* in on the 10th day of *Aug.* in the year 1899 and is 15 years of age.

Deponent further says that he is informed by the officer to whom this application is made for an employment certificate, that the evidence of age of said child must be presented in the following order, namely, (a) birth certificate; (b) certificate of graduation; (c) passport or baptismal certificate; (d) other documentary evidence; (e) physicians' certificates.

And deponent further says that the paper now produced for filing in the Department of Health of the City of New York, is the *transcript of birth record* of the said child; and that the child who is named in the said paper as *Isidore Goldstein* is the child now appearing with me, whose true name is, and for whom deponent makes the application aforesaid, and no evidence of age specified in any of the preceding subdivisions of the law, as above set forth, can be produced.

Sworn to before me this 28 day of *Sept.*, 1914.

ABRAHAM GOLDSTEIN.
Signature of parent, guardian, custodian,
ISIDORE GOLDSTEIN,
Signature of child.

JOHN J. O'BRIEN.
Signature of officer issuing the certificate.

STATEMENT OF A MEDICAL OFFICER OF THE DEPARTMENT OF HEALTH.

I hereby certify that *Isidore Goldstein*, the above-named child, has in my opinion, reached the normal development of a child of its age, and is in sound health and is physically able to perform the work which it intends to do.

WM. T. GARDNER, M.D.
Signature of a medical officer of the board of health.

STATEMENT OF OFFICER ISSUING THE CERTIFICATE.

I hereby certify—

1. That the following papers relating to the above-named child have been filed in this office:

(a) Its school record, filed out and signed, as required by law.

(b) *Transcript of birth record* (its transcript of birth record, certificate of graduation, passport or baptismal certificate, other documentary evidence or physicians' certificate).

(c) Affidavit and application of the parent, guardian, or custodian of the child, showing the place and date of its birth.

2. That said child has appeared before me and has been examined and that said child is able to read and legibly write simple sentences in the English language, and is, in my opinion, 14 years of age or upwards.

3. That said child has in my opinion, reached the normal development of a child of its age, and is in sound health and is physically able to perform the work which it intends to do, as appears by the statement of the examining physician.

JOHN J. O'BRIEN,
Signature of officer issuing the certificate.

[New York City Form 8 (reverse). See p. 25.]

Application No. 7043.
Name of child, *Isidore Goldstein.*
Address, *125 E. 80th St.*
Date of birth, *Aug. 10, 1899.*
Place of birth, *Russia.*
Color of hair, *Black.*
Color of eyes, *Black.*
Height, 5 ft. 5-3/4 in.
Weight, 108 lbs.
Color, *White.*
Mother tongue, *Hebrew.*
Birthplace of father, *Russia.*
Distinguishing characteristics:
.....
.....

[New York City Form 9. See p. 25.]

Name, *James Collins*. Address, *75 Monroe St.*Held for *Defective vision*.Date held, *May 10, 1915.*Treated for *Astigmatism*.Date treated, *May 20, 1915.*Treated by *Dr. Philip Snow*.Final disposition, *Certificate granted.*

Remarks:

.....
WM. T. GARDNER.
 Medical Inspector.

CASES TEMPORARILY WITHHELD.

Bureau of child hygiene.

Division of employment certificates.

[New York City, Form 10. See p. 26.]

DEPARTMENT OF HEALTH, THE CITY OF NEW YORK,
 SANITARY BUREAU, DIVISION OF CHILD HYGIENE.
 BOROUGH OF *Manhattan*,
 NEW YORK, *Mar. 27, 1914.*

Mrs. *Lery*.

Sir: You are informed that your application made for an employment certificate for *Sol Lery* can not be granted on account of *physical incapacity*.

Respectfully,

S. JOSEPHINE BAKER, M. D.,
 Director of the Bureau of Child Hygiene.

[New York City, Form 11. See p. 26.]

Name, *De Pina Luigr*.
 Residence, *48 Driggs Ave.*

Refusal No.
1887.

REFUSED.

Date of refusal, *2/27/14.*

CAUSE OF REFUSAL.

Malnutrition.

[New York City Form 12. See p. 27.]

DEPARTMENT OF HEALTH, THE CITY OF NEW YORK,
 SIXTH AVENUE AND 55TH STREET,
 SANITARY BUREAU, DIVISION OF CHILD HYGIENE,
 NEW YORK, *Mar. 26, 1914.*

To the Board of Health:

Gentlemen:

In the following case it appears to my satisfaction that

August Mathews,

residing at *463 Columbus Ave.*, in the Borough of *Manhattan*, City of New York, the child for whom an employment certificate is requested, and who has presented a school record, is in fact over fourteen years of age; that satisfactory documentary evidence of age can be produced which does not fall within any of the provisions of the subdivisions preceding subdivision (d), of sections 71 and 163 of chapter 291 of the laws of 1907, and that none of the papers mentioned in said preceding subdivisions can be produced, and I therefore present to the board of health, for its action, this statement signed by me showing such facts, and I also submit the following affidavits and papers which have been produced before me constituting evidence of age of such child, viz:

Census record.

Respectfully submitted.

MARY TAYLOR,
~~Medical Examiner.~~
 Clerk.

(The board may, by resolution, provide that such evidence shall be entered on the minutes of the board, and shall be received as sufficient evidence of the age of such child for the purposes of this section.)

[New York City Form 12 (reverse). See p. 27.]

DEPARTMENT OF HEALTH,
SANTARY BUREAU,
DIVISION OF CHILD HYGIENE.

NEW YORK, Mar. 26, 1914.

MARY TAYLOR,
Medical Examiner,
Clerk.

DEPARTMENT OF HEALTH,
SANTARY BUREAU,
DIVISION OF CHILD HYGIENE,
THE CITY OF NEW YORK.

NEW YORK, Mar. 26, 1914.

Respectfully forwarded.

August Mathews

of 403 Columbus Ave., an applicant for certificate of employment is unable to furnish a birth certificate, a certificate of graduation, passport, or a baptismal certificate, as evidence of age, and does present other documentary evidence that he is fourteen years of age or upwards, viz:

He presents a certificate from Per. Cen. Bd. in which it is stated that according to their records dated 5/27/10 he was born on Sept. 15, 1893 (was then 17 years, 10 months and 14 days).

He is shown by his school record to be 15 years and 8 months old, and as he is unable to further produce the evidence of age otherwise required, and presents the above documentary evidence, I would respectfully recommend that a certificate of employment be granted to August Mathews.

Borough Chief, Division of Child Hygiene.

Borough of Manhattan.

Evidence of age of
August Mathews.

NEW YORK, ..., 19
Approved and respectfully forwarded to the sanitary superintendent.

Chief, Division of Child Hygiene.

SANTARY BUREAU.

NEW YORK, ..., 19

Approved and respectfully forwarded to the board.

Sanitary Superintendent.

SANTARY BUREAU.

NEW YORK, ..., 19

Respectfully referred to the chief, division of child hygiene, with instructions to issue a certificate of employment to the within applicant.
By order of the sanitary superintendent.

..... Clerk.

DEPARTMENT OF HEALTH,
SANTARY BUREAU,
DIVISION OF CHILD HYGIENE.

NEW YORK, ..., 19

Referred to mercantile office, with instructions to have a certificate of employment issued to applicant.
By order of the chief of division.

..... Clerk.

[New York City Form 18. See p. 27.]

DEPARTMENT OF HEALTH, THE CITY OF NEW YORK,
Borough of *Manhattan*.

APPLICATION FOR EMPLOYMENT CERTIFICATE AND FOR PHYSICIANS' CERTIFICATE OF AGE.

NEW YORK, *Sept. 25, 1913.*

To the Board of Health, City of New York:

GENTLEMEN:

I, the undersigned, hereby make application for an employment certificate under the provisions of the labor law of the State of New York, to be issued to and in the name of

*Ida Goldmark,*the child of which I am the *mother*, and who resides at *653 Fifth Street*, in the City of New York, Borough of *Manhattan*; and I hereby further make application for physicians' certificates.*IDA GOLDMARK,*
Signature of child.*Her*
X CELIA GOLDMARK.
mark. Signature of parent.

AFFIDAVIT.

STATE OF NEW YORK,

CITY OF NEW YORK, COUNTY OF *N. Y.* ss.:*Celia Goldmark*, being duly sworn, deposes and says:That she is the applicant above named and resides at No. *653 Fifth Street*, in the City of New York, Borough of *Manhattan*.Deponent is the parent *mother* of the child above named.

That deponent asks for the issuance of physicians' certificates on which, together with a school record, an employment certificate may be issued in accordance with the labor law of the State of New York.

Her
X CELIA GOLDMARK.
mark.Sworn to before me this *25* day of *September* 1913.*MARY TAYLOR.*
Signature of officer issuing certificate.

I hereby certify that the child above named was produced before me and is apparently at least fourteen years of age, and I hereby receive the foregoing application for physicians' certificates and file the same this date.

Dated New York, *Sept. 25, 1913.**MARY TAYLOR.*

Not less than ninety days having elapsed since the date of the filing of this application for physicians' certificates, and no facts appearing within such period nor after an examination of the statements contained in said application tending to discredit or contradict any material statement of such application, I hereby direct the child named in said application to appear for physical examination before two physicians designated by the board of health.

Dated New York, *Mar. 26, 1914.**JOHN J. O'BRIEN.*We, *Wm. T. Gardner, M. D., and J. L. Blumenthal, M. D.*, physicians officially designated by the board of health, hereby certify that the child named in the within application, appeared this day before us for physical examination; and we hereby severally further certify that we have separately examined such child, and that in our opinion, the said child is at least fourteen years of age.*WM. T. GARDNER, M. D.*
J. L. BLUMENTHAL, M. D.

(In case the opinions of such physicians do not concur, the child shall be examined by a third physician and the concurring opinion shall be conclusive for the purpose of the law as to the age of the child.)

Deponent further says that the said child is *16+* years of age; that she was born at *Russia* on the *14* day of *August, 1898*, and that the present residence of said child is *653 Fifth St.*, in the Borough of *Manhattan*, City of New York.

This deponent, your petitioner for physicians' certificates, also alleges that she is unable to produce any of the evidence of age of said child above mentioned, specified in sections 71 and 163 of the labor law of the State of New York, namely:

- (a) Birth certificate;
- (b) Certificate of graduation;
- (c) Passport or baptismal certificate;
- (d) Other documentary evidence.

That the following facts are presented for the consideration of the officer to whom application is made for the issuance of an employment certificate, to assist in determining the age of said child, namely:

*Goldmark.*Application No. *2329.*

PHYSICIANS' CERTIFICATE.

Sept. 25, 1913.
Dec. 25, 1913.
Notified 5/24/1914.

[New York City Form 14. See p. 32]

DEPARTMENT OF HEALTH, THE CITY OF NEW YORK,
DIVISION OF CHILD HYGIENE,
NEW YORK, March 16, 1914.

I, *Harry K. Fellows*, an applicant for duplicate employment certificate, hereby state: That employment certificate No. 7023 issued by the Department of Health of the City of New York on the *tenth* day of *March*, 1914, has been lost in the following manner: *Fell out of a book on my way home*, and, after making a diligent search I have been unable to find same.

I therefore request that a duplicate certificate be issued.

(Signature) *HARRY K. FELLOWS*,
(Address) *145 West 80th St.*

[New York City Form 15. See p. 33.]

DEPARTMENT OF HEALTH, CITY OF NEW YORK,
BUREAU OF CHILD HYGIENE,

EUGENE W. SCHEFFER, Secretary.

Date *Dec. 7, 1913.*

This is to certify that the department of health has investigated the proof of age of

John Smith,
who resides at *485 Spruce St.*,

and whose signature is hereto affixed, and is satisfied that the said minor is over sixteen years of age, and therefore entitled to work without an employment certificate.

This application for an employment certificate is hereby refused, as the applicant is over age.

The department of health will not issue duplicates of this paper.

MARY L. MORRISON,
Chief, Division of Employment Certificates.
JOHN SMITH,
(Signature of child.)
B. J. BAKER,
Director, Bureau of Child Hygiene.

[New York City Form 16. See p. 36.]

DEPARTMENT OF HEALTH,
THE CITY OF NEW YORK.

I, the undersigned, hereby certify that the information noted below is a correct copy of the facts contained in a certain *birth certificate* presented as documentary evidence of age of the child whose name (birth certificate passport)

appears thereon.

Name of child, *Rose Pokrivsky*.
Date of birth or age given, *Nov. 14, 1899*.
Name of father, *Levi Pokrivsky*.
Name of mother, *Sarah Pokrivsky*.
Birthplace, *Austria*.

(Signed) *JOHN O'BRIEN*.
(Officer issuing paper.)

Copy or translation made by *J. V. Madison*.
Original returned to *ROSE POKRIVSKY*.
(Signature of child.)

JACOB SOBEL, M. D.,
Borough Chief.

Date *May 3, 1914*.

[New York City Form 17. See p. 37.]

DEPARTMENT OF HEALTH, THE CITY OF NEW YORK,
DIVISION OF CHILD HYGIENE.

I, the undersigned, hereby certify that a certain diploma bearing date *Jan. 29 1914*, was this day presented and exhibited to the department of health of the City of New York to aid in securing an employment certificate under the provisions of the labor law of the State of New York and in lieu of the school record required by said law. That said diploma was issued to and bears the name of *Ida Goddard*; that said diploma was issued by *Dept. of Educ.* (Public School No. 15), situated in the City of New York, Borough of *Man.*, and certifies, among other things, that said child has satisfactorily completed the course for elementary schools.

JACOB SOBEL, M. D.,
Chief of the Division.

New York, *Mar. 25, 1914*.

46446°—17—10

[New York City Form 18. See p. 38.]

NEW YORK, Mar. 27, 1914.

To the Board of Health.

GENTLEMEN:

I hereby certify that, according to the records of the church or congregation of
Church of Our Lady of Loretto,
 (Corporate name of church.)

situated at 303 Elizabeth St.

Messina Blandino was born at *N. Y. C.* on *September 26, 1889,* was baptized at said church
 (Child's full name.) (Place of birth.) (Date of birth.)
Oct. 29, 1889, and that she was *1 month* of age at that date.
 (Date of baptism.)

(Signed) *ENRICO C. LUIGI,*
 Minister.
Church of Our Lady of Loretto.
 Church.
JACOB SOBEL, M. D.

[Place seal here.]

[New York City Form 19. See p. 39.]

CITY OF NEW YORK, STATE OF NEW YORK, COUNTY OF NEW YORK, ss:

Max Mushnitzky, being duly sworn, deposes and says: That on the *1st day of March, 1913,* deponent was the rabbi of the congregation situated at *225 Christopher Ave., Brooklyn,* and that on said date *Leon Spielman* was Barmitzva at the synagogue of the above-mentioned congregation.

Deponent further states that he was present on said date, at which time said *Leon Spielman* began to lay the phylacteries according to Jewish rites. That a record was made in the said congregation of the date when the said boy was Barmitzva as aforesaid and the date, according to said records, is *March 1, 1913,* and that no boy can be Barmitzva until he has reached thirteen years of age.

*MAX MUSHNITZKY.*Sworn to before me this *27th* day of *March, 1914.**DELIA JACOBSON.*

[Seal of Commissioner of deeds—Notary public, New York City, applied at foot of paper.]

[New York City Form 20. See p. 39.]

DEPARTMENT OF EDUCATION, THE CITY OF NEW YORK,
 BUREAU OF ATTENDANCE, 154-156 EAST 68TH STREET.

CENSUS AGE CERTIFICATE.

Nov. 14, 1914.

This is to certify that according to the records of this office dated *Mar. 10, 1914,* *Beate Poland,* residing at that time at *11 Mulberry St., Man.,* was recorded by the census enumerator as follows:
 Date of birth, *Jan. 4, 1900.*

JOHN W. DAVIS,
 Director.

[New York City Form 21. See p. 55.]

EXAMINATIONS FOR SCHOOL RECORDS.

March 19, 1914.

Dictation:

"Here, Harold," I said, "is some money. Go buy yourself some more marbles, and when you have them, keep them to play with. But don't play for keeps; it is gambling, and the gambler deserves to lose."

Bill:

Mrs. White bought of Blank & Company 14 yards silk at \$2 1/2 per yard, 6 doz. rolls tape at 45¢ a dozen, 6 waists at \$2 1/3 each, 16 bolts ribbon at 12 1/2¢ each. Make out a receipted bill for same.

Arithmetic:

1. A chest containing 62 5/16 pounds was found to hold 12 1/4 pounds spoiled tea. How many pounds of good tea were there left?
2. What is the cost of 25 bushels of wheat at 81 1/2¢ a bushel?
3. A ship sails 7,812 miles in 36 days. How far does it sail in one day?

Reading:

Fourth year. Character Building Reader. "The Boy Who Tried." Page 36.

March 5, 1914.

Dictation:

Long, long ago, a ship full of people was sailing across the ocean to this land. These people were called Pilgrims. Pilgrim means wanderer, and these people were wandering from place to place in search of a home where they could worship God as they thought right.

Bill:

Mr. James Blank bought of Thomas Smith 3 yards of lace at 65¢ a yard, 3 doz. handkerchiefs at \$4.75 a dozen, 44 yards silk at \$1.15 a yard, and a table cloth for \$8. Make out and receipt bill for the same.

Arithmetic:

1. A farmer had 275 sheep and sold 3/5 of them. How many had he left?
2. William is 11 3/4 years old and Thomas is 9 5/12 years old. How much older than Thomas is William?
3. At \$7.50 each how many barrels of flour can be bought for \$637?

Reading:

Heath's Fourth Reader. "The Three Giants." Page 18.

[Six took the examination of March 5th and passed.]

[Continued on opposite page.]

February 6, 1914.

Arithmetic:

1. If I place \$30 in a savings bank at 3 1/2% interest, how much interest will be due me at the end of 6 months?
2. Market prices are as follows: Round steak, 25¢ a pound; ham, 28¢ a pound; mutton, 24¢ a pound; veal chops, 29¢ a pound. Find amount of bill if you should buy 2 pounds of round steak, 1/2 lb. ham, 4 3/4 lb. mutton. Make a bill. Receipt it.
3. A man employed 80 girls in his factory. He had to reduce his force 15%. How many girls did he have to discharge?
4. A man had three pieces of muslin. One contained 6 1/2 yd., another 23 2/3 yd., and another 13 1/8 yd. He sold 17 3/4 yd. How many yards had he left?
5. I bought 66¢ worth of sugar. If sugar is worth 6 1/2¢ a pound, how many pounds should the grocer give me?
6. If a man earns \$13.50 a week, and saves one-fourth of the wages, how much does he save in a year?
7. Mental work.
 - (a) Tell time.
 - (b) Cost of 100 books at 12 1/2¢ each.
 - (c) Cost of 3 handkerchiefs if they are sold at 75¢ a half dozen?
 - (d) I spent \$2.16 and 73¢. How much change from a five-dollar bill?
 - (e) Sheffield milk is 9¢ a quart. The month's bill was \$2.70. How many quarts of milk had been bought?
8. Divide \$16,239.17 by 102.06.
9. Multiply \$13,665 by \$8 2/5.
10. Add dictate:

\$107.39
870.93
82.16
1,217.61
24.03
69.97
513.80
76.44
500.17

Spelling:

citizens
injure
millinery
does
recommendation
intelligent

permits
Broadway
punctuality
fifteenth
mayor

majority
obedience
favored
Chicago
superintendent

manager
writing
pleasing
to-day's paper
whose name is

Letter:

Write a business letter making an application for a position.

Dictation:

By teaching all, especially the children of America, to speak our common language; to understand and love liberty; to honor the flag; to respect the Government and to aid in strengthening and perfecting our laws and institutions.

The pride of a nation is in its children and youth. Its hope and security are in their intelligence, morality and patriotism.

Reading:

Baker and Carpenter Sixth Year Language Reader.

[New York City Form 22 (reverse). See p. 54.]

PHYSICAL RECORD.

Name, *Hemlin, Max*. Born, *8/31/00*.
 Nationality of father, *English*. Mother, *Italian*. Number in family, adults *5*, children *15*, *89* *43*.
 Number of birth *7*. History of measles, *No*. Scarlet fever, *No*. Diphtheria, *Yes*. Pertussis, *No*. Pneumonia, *No*. Grippe, *No*.
 Date of 1st examination, *12/8/09*. In school, *16*.

1		2		3		4		5		6		7		8		9	
1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
1. School year.....																	
2. Term.....																	
3. Class.....																	
4. Recinations.....																	
5. Diseases during term.....																	
6. Date of physical examinations.....																	
7. Defective vision.....																	
8. Defective hearing.....																	
9. Defective nasal breathing.....																	
10. Hypertrophied tonsils.....																	
11. Tubercular lymph nodes.....																	
12. Pulmonary disease.....																	
13. Cardio disease.....																	
14. Chorea.....																	
15. Orthopedic defect.....																	
16. Malnutrition.....																	
17. Defective teeth.....																	
18. Defective palate.....																	
19. Height.....																	
20. Weight.....																	
21. Mentality.....																	
22. Effort.....																	
23. Proficiency.....																	

Teeth. Personal extraction. Mouth hygiene.
Glasses.

[New York City Form 23. See p. 67.]

Department of Education.

Original.

Bureau of Attendance.

REPORT OF POLICE OFFICER ON CHILD FOUND ON STREET DURING SCHOOL HOURS.

Kappo, Maurice.		Born month. 1		27	108	1	1	1
1. Family name of child.	Given name.	Born month.		Day.	Year.	Boy.	Girl.	
Kappo.		Sallus.		Mary.				
2. Family name of parent or guardian.		Father's given name.		Mother's.				
242 Monroe.		M		1		4		1
3. Residence.	Number.	Street.		Borough.	Front.	Rear.	Floor.	Apt. No.
Wall and Chilton Sts.								
4. Where found.		Block number.						
9.55 a. m.		Consecutive office number.						
5. Hour.		District ass'gn'm't number.						
6. Return, 114 M		4-24-16		W. 6643.				
7. Returned to public school.		Mo. Da. Yr.		Patrolman.				
8. Disposition.		McDuffy.		Emma Black.				
9. s B ¹ 4-26-16-1.30		McDuffy.		Principal.				
10. Truant. Likes to move around business district.		Date received.						
11. Returned by mother to school 4/28/16. McDuffy.		Date referred.						
12. Family unbroken.		Date received.						
		Date referred.						
		Date reported.						

[New York City Form 24. See p. 71.]
BY RESIDENT—ATTENDING LIST—BY FAMILIES.

Department of Education.

Bureau of Attendance.

Date moved.	Block No.	House No.	Street.	Floor.	Date moved.	Block No.	House No.	Street.	Floor.
	765331	554	Upton Ave.	1					

Father—Last name of *Reple,*
Italy.
Mother—Last name of *Tony.*
Louise.
First name of

	1. Child—Given name.	2. Child—Given name.	3. Child—Given name.	4. Child—Given name.	5. Child—Given name.	Guardian—Last name of.	Guardian—First name of.
1. Child—Given name.	<i>Josephus</i>	<i>Annie</i>	<i>Mary</i>	<i>Rosie</i>	<i>Pasqu.</i>		
2. Birthplace.	<i>Italy</i>	<i>Italy</i>	<i>Italy</i>	<i>Italy</i>	<i>N. Y. C.</i>		
3. Born Mo. Da. Yr.	<i>6 | 12 | 00</i>	<i>11 | 23 | 05</i>	<i>9 | 3 | 07</i>	<i>3 | 14 | 09</i>	<i>1 | 1 | 11</i>		
4. School now attended.	<i>6 Grad</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>		
5. Evidence.	<i>Y. N.</i>	<i>Y. N.</i>	<i>Y. N.</i>	<i>Y. N.</i>	<i>Y. N.</i>		
6. Lit.	<i>Lit.</i>	<i>Lit.</i>	<i>Lit.</i>	<i>Lit.</i>	<i>Lit.</i>		
7. Employ. cert. No.	<i>M'788</i>						
8. Yes. No. Employed.	<i>Yes.</i>	<i>Yes.</i>	<i>Yes.</i>	<i>Yes.</i>	<i>Yes.</i>		
9. Deceased.	<i>Month. Day. Year.</i>	<i>Month. Day. Year.</i>	<i>Month. Day. Year.</i>	<i>Month. Day. Year.</i>	<i>Month. Day. Year.</i>		
10. Deceased.	<i>Month. Day. Year.</i>	<i>Month. Day. Year.</i>	<i>Month. Day. Year.</i>	<i>Month. Day. Year.</i>	<i>Month. Day. Year.</i>		

[New York City Form 24 (reverse). See p. 71.]
WHEN AND BY WHOM ATTENDED—IMMIGRANTS.

Department of Education.

Bureau of Attendance.

Date canvassed.	Block No.	Name of person interviewed at home.	Shield No.	Name of officer.	Remarks.
<i>4/27/16</i>	<i>670254</i>	<i>Mother.</i>	<i>42</i>	<i>R. C. Wright.</i>	

(OVER)

3.

Permanent Census Board.

[New York City Form 25. See p. 71.]

EMPLOYMENT RECORD.

The City of New York.

Number.	Street.	Floor.	Number.	Street.	Floor.	Number.	Street.	Floor.
649	Main St.		4					
<i>Jones, John.</i> 1. Child—Last name of. Given name. <i>John.</i> First position. Second position. <i>2A</i> Grade.								
<i>J. P. Smith Co.</i> 2. Employer. <i>Employer.</i> <i>Johnson & West St.</i> 3. Place of business. <i>Place of business.</i> <i>Clerk, mail order house.</i> 4. Occupation. <i>Clerk, statistical office.</i>		Born—Mo. da. yr. <i>6 | 3 | 91</i> Third position. <i>Normal</i> Health. <i>71</i> Last school. <i>M-1603</i> Employ cert. No. <i>Fourth position.</i>		<i>Harold</i> Father. <i>May</i> Mother. <i>Fifth position.</i>				
<i>9/18/16</i> 5. Date taken—Date given up. <i>9/18/16</i> Date taken—Date given up. 6. Advertisement. <i>Didn't like work.</i> 7. How obtained. <i>Didn't like work.</i> 8. Why given up. <i>Pa'd Mo. Da. Piece</i> 9. by <i>Wk. Hr. work.</i> <i>\$2.00.</i> 10. Average weekly wages. <i>Two weeks.</i> 11. Time idle at this position. <i>None.</i> 12. What chance for promotion.		<i>Employer.</i> Place of business. Occupation. Date taken—Date given up. <i>Date taken—Date given up.</i>		<i>Employer.</i> Place of business. Occupation. Date taken—Date given up.				

School

[New York City Form 25 (reverse). See p. 71.]

EMPLOYMENT RECORD.

The City of New York.

Permanent Census Board.

Date canvassed.	Time or block No.	Name of officer.	Sixth position.	Seventh position.	Eighth position.
4/20/16	1.06	L. W. White	Employer. Place of business. Occupation. Date taken—Date given up.	Employer. Place of business. Occupation. Date taken—Date given up.	Employer. Place of business. Occupation. Date taken—Date given up.

Permanent Census Board.

[New York City Form 96. See p. 71.]
 ENUMERATOR'S ASSIGNMENT AND DAILY REPORT.

The City of New York.

Block numbers 76309. Date begun 4/29/16. Date completed 4/27/16.

Description: South Elm Ave. West 5th Ave. 428-522.

North Spruce St. East Orange Ave., 431-433.

5th Side

Taken out.		Returned.												H. Inf.								
Blue.	White.	Yellow.	Cards not on block.		Not found, address unknown.		Same address.				Moved, address known.		Moved in.		Total located.		Families visited.		Employed.		H. Inf.	
			F.	C.	F.	C.	F.	C.	F.	C.	F.	C.	Old N.Y.C. address.	Outside N.Y.C.	Total located.	Families visited.	Old.	New.				
																		Leg.	Illeg.			
50			0	1	3	3	8	3	0	4	0	0	30	68	3	8	36	91		5		Errors.
																					Errors.	
																					Errors.	
																					Errors.	
																					Errors.	

SPECIALLY CASES REPORTED.																								
Physically defective children.					Violations comp. ed. and child-labor laws.					Relief.		Children's soc'y.			Time reporting a. m. 8.30.									
Crippled.	Deaf.	Dumb.	Blind.	Cr.-Df., Db.-Bl.	Ment. ill.	Tuber- cular.	Inf. paraly- sis.	Children.	Adults.	Illeg. det.		Illeg. employ.		Poverty.	Unsanitary.	Neglect.	Cruelty.	Immorality.	Intoxication.	Time leaving p. m. 4.00.	Elapsed time 7 1/2 hrs.	Time at lunch 1 hr.	Clerical work—Home 30 min.	Total hours employed 8.
										Residents.	Immigrant.	No work cert.	Under age.												Res.	Im.	Res.	Im.

I hereby certify that the above report is correct:
 Date 4/27/16. Shield No. 98.

JAMES BROWN,
 Enumerator.

154 EMPLOYMENT-CERTIFICATE SYSTEM IN NEW YORK.

[New York City Form 27. See p. 71.]

Department of Education.

Bureau of Attendance.

PATROLMAN'S REPORT ON FAMILY'S CHANGE OF RESIDENCE.

Number.	Street.	Floor.	Apt. No.
Place from which removed, 17.....	W. 11th.....	3	308
Place to which removed, 25.....	E. 17th.....	5	517

Family name of father or mother.	Given name.	Number children under 16.	Given names of children.
Schultz.....	Sera.....	3	Henry, Mary, Frederick.

The foregoing information was obtained at the first address '.....

" " " " " " " " second address.....

Precinct.	Mo. da. yr.	Shield No.	Patrolman's signature.
8	3/7/15	317	Michael Doyle.

[New York City Form 28. See p. 75.]

(A copy of this form is sent daily to the compulsory attendance department.)

DEPARTMENT OF HEALTH,
THE CITY OF NEW YORK.

TO THE COMMISSIONER OF LABOR.

SIR: In compliance with the requirements of the labor law you are hereby notified that the department of health has issued the following employment certificates during the month of April 1915.

Borough of Manhattan.

No. of certificate.	Date of issue.		Names.	Residence.		School record.	Issued by public school.	Date of birth.
	Month.	Day.		No.	Street.			
			Grade.					
M 4968	Apr.	1	Brown, Harold.....	11	Maple.....	19	Bk.	July 21/01.
M 4969	"	"	Jones, Mary.....	7 A.	Birch.....		39	Apr. 14/00.
M 4970	"	"	Smith, John.....	8 A.	Elm.....	16	89	Nov. 30/00.
M 4971	"	"	White, Dora.....	8 B.	Koergreen.....		87	Feb. 16/02.
M 4972	"	"	Block, Max.....	7 A.	Poplar.....	1	77	Feb. 28/01.
M 4973	"	"	Green, Nora.....	7 B.	Spruce.....		90	Oct. 4/01.
M 4974	"	"	Holstein, Celia.....	7 B.	Walnut.....		Par.	Nov. 9/00.
M 4975	"	"	Levsky, Ella.....	8 B.	Pine.....		62	Jan. 10/03.
M 4976	"	"	Murphy, Louis.....	7 B.	Willow.....		Par.	May 7/01.
M 4977	"	"	Steinhaus, Rachel.....	7 A.	Hickory.....		62	Sept. 28/00.
M 4978	"	"	Paratin, Anna.....	8 A.	Redwood.....		56	Dec. 29/01.

[New York City Form 29. See p. 75.]

DEPARTMENT OF EDUCATION—NOTICE TO DISCHARGE ON ISSUANCE OF EMPLOYMENT CERTIFICATE.

1.	<i>87</i>	<i>Bx</i>	<i>4-13-16</i>	<i>7594</i>
	School in which registered.	Boro.	Mo. Da. Yr.	Employ. cert. number.
2.	<i>Newton.</i>	<i>Nelly.</i>		<i>9-12-01</i>
	Family name of child.	Given name.	Born	Mo. Da. Yr.
3.	<i>483</i>	<i>Jackson.</i>	<i>3</i>	<i>Man.</i>
	Number.	Street.	Floor.	Boro.
4.	<i>7a</i>	<i>3579</i>		<i>47</i>
	Class or grade.	Investigation number.		Discharge number.
5.	<i>White & Co.</i>		<i>Tailor.</i>	
	Name of employer.		Nature of business.	
6.	<i>57 Washington St.</i>			
	Place of business.			
7.	<i>Sewing.</i>		<i>\$4.25</i>	
	Nature of employee's work or position.		Wages.	

Original
1
Original

[New York City Form 30. See p. 76.]

Department of Education. Original. Bureau of Attendance.
NOTICE OF REFUSAL OF EMPLOYMENT CERTIFICATE BY DEPARTMENT OF HEALTH.

<i>Brown.</i>	<i>Samuel.</i>	<i>2</i>	<i>10</i>	<i>01</i>	<i>✓</i>	
Family name of child.	Given name.	Born—Month.	Day.	Year.	Boy.	Girl.
<i>16-18.</i>	<i>Joseph.</i>			<i>Mary.</i>		
Family name of parent or guardian.	Father's given name.			Mother's.		
<i>16-18.</i>	<i>Park.</i>		<i>✓</i>	<i>3</i>	<i>18</i>	
Number.	Street.	Front.	Rear.	Floor.	Apt. No.	
Cause of refusal.				<i>77654</i>		
<i>Phys. inc. 10147.</i>				Consecutive ref. No.		
				<i>132348</i>		
				Dist. assignment No.		
..... Officer's report, <i>Attending Johnson High.</i> <i>5th term.</i> <i>4/24/16 p. m.</i> <i>4/25/16 2.10.</i> <i>4/25/16.</i> <i>4/26/16 9 a. m.</i> <i>McDuffy,</i> Attendance Officer.						Date received. Date referred. Date reported.
Disposition <i>Family unbroken.</i> 						

[New York City Form 31. See p. 76.]

Name, *John Brown.* Age *14.* Yrs. *3.* Mos.
Address, *12 E. 9th St.* School, *17.* Grade, *7 A.*

Refused.	Height.	Weight.	Cause of refusal.	Med. insp.
<i>May 4, '16.....</i>	<i>5 ft. 5 in.....</i>	<i>90</i>	<i>Cardiac.....</i>	<i>Brice.</i>
Revisits.....				
.....				

Granted.
No. of certificate.

PHYSICAL INCAPACITY CARD.

[New York City Form 32. See p. 76.]

DEPARTMENT OF HEALTH, CITY OF NEW YORK,
BUREAU OF CHILD HYGIENE, DIVISION OF EMPLOYMENT CERTIFICATES,
Borough of *Manhattan*,
NEW YORK, *April 24, 1916.*

To the Borough Chief.

Sir: I have the honor to submit the following report in relation to the issuance of employment certificates during the week ending *April 22, 1916.*

Summary of action taken on employment certificates.

Applications pending beginning of week.....	125	
New applications received.....	113	
		238
Employment certificates granted.....	126	
Employment certificates refused.....	12	
Applications made pending.....	94	
		238
Duplicates.....		19

Employment certificates refused.

Insufficient tuition.....		
Insufficient education.....		
Under age.....	2	
Over age.....	3	
Physical incapacity.....	13	
		18
Malnutrition.....	3	
Cardiac.....	1	
Pulmonary.....		
Miscellaneous.....	9	

Applications temporarily withheld.

Number previously withheld.....	80	
New cases.....	9	
		89
Certificates granted.....	21	
Cases otherwise terminated.....	9	
Cases now pending.....	59	
		89

Physical examinations.

Number examined.....		101
Defective teeth only.....		3
Defective associated.....		167
Defective vision.....	28	
Acute eye diseases.....	0	
Defective hearing.....	2	
Teeth.....	25	
Cardiac.....	1	
Pulmonary.....	0	
Mouth breathing.....	7	
Hypertrophied tonsils.....	13	
Palate.....	0	
Glands.....	24	
Anemia.....	1	
Malnutrition.....	3	
Hernia.....	0	
Nervous diseases.....	0	
Skin.....	0	
Goitre.....	2	
Orthopedic.....	1	
		167

Respectfully submitted.

JOHN J. O'BRIEN,
Issuing officer
KATHERINE E. MARYSON,
Medical examiner.

No. 76.

[Buffalo Form 1. See p. 28.]

DEPARTMENT OF HEALTH, BUFFALO—APPLICATION FOR EMPLOYMENT CERTIFICATE OF CHILD BETWEEN THE AGES OF 14 AND 16 YEARS IN MANUFACTURING, MERCANTILE, AND OTHER ESTABLISHMENTS.

Germany.

To the Department of Health, Buffalo, N. Y.

Application is hereby made for an employment certificate for *Elsie Samuels*.

Signature of child.

PAULINE SAMUELS,

Signature of parent or guardian or custodian.

Address, *346 Dasey St.*School record of *Elsie Samuels*.

According to the laws of 1903 the principal or chief executive officer of the school which such child attended shall furnish, on demand, a certificate containing the following facts:

To the Department of Health of the City of Buffalo, N. Y.

GENTLEMEN: I, the undersigned, the principal (or chief executive officer) of the public school No. 43, situated at No. *Loejoy & Gold St.*, in the city of Buffalo, do hereby certify that *Elsie Samuels*, the child hereinafter referred to, has regularly attended the said school *one hundred and eighty-eight* days (Write the number of days.)

during the twelve months next preceeding its fourteenth birthday (or next preceeding its application for this school record); and that said child is able to read and write simple sentences in the English language, and has received during such period instruction in reading, spelling, writing, English language and geography, and is familiar with the fundamental operations of arithmetic up to and including fractions, and has completed the work of the first six years of the public elementary school or school equivalent thereto or parochial school from which such school record is issued.

The said school record gives the date of birth of said child as *July 16, 1899*, residence, *346 Dasey St.*; and the name of its parents (guardian or custodian) as *Herman Samuels*.

FREDERICK W. FROST,

Principal or chief executive officer of the school.

Dated, *June 25*.

(The law requires the school record to be signed by the principal or chief executive officer of the school and it must be furnished to any child who, after due examination and investigation, may be entitled thereto. The school record must contain, among other things, a statement certifying that the child has regularly attended the public schools or schools equivalent thereto, or parochial schools, for not less than 130 days during the twelve months next preceeding its fourteenth birthday, or during the twelve months next preceeding its application for this school record.)

(OVER)

[On the left margin:]

This is not a child-labor certificate and must not be accepted as such.

[Buffalo Form 1 (reverse). See p. 28.]

Filing No. *2443*.Date, *9/3/14*.

I hereby certify that the within-named applicant personally appeared before me on this date, was examined, and complied with all legal requirements, and is entitled to an employment certificate.

J. D. BALDWIN,

Officer issuing the certificate.

[On the right margin, running down:]

Section 384, 1, 5, of the Penal Code as amended by chapter 507, Laws of 1907.

Any person who knowingly makes a false statement in or in relation to any application made for an employment certificate as to any matter required by articles 6 and 11 of the labor law to appear in any affidavit, record, transcript, or certificate therein provided for, is guilty of a misdemeanor, and upon conviction shall be punished for a first offense by a fine of not less than 20 nor more than 50 dollars; for a second offense, by a fine not less than 50 nor more than 200 dollars, or by imprisonment for not more than 30 days or by both such fine and imprisonment; for a third offense by a fine of not less than 250 dollars, or by imprisonment for not more than 90 days, or by both such fine and imprisonment.

[Buffalo Form 2. See p. 28.]

No. 85.

STATE OF NEW YORK, COUNTY OF ERIE, CITY OF BUFFALO, ss:

Rose Jackson, being duly sworn, deposes and says that she is the mother of *John Jackson*, the child for whom an employment certificate is desired; that the said child was born in *Eschator, N. Y.*, on the 3d day of *Aug., 1899*; but that it is impossible to produce any of the documentary evidence relative to the age of this child, as required by subdivision two of section 71, and section 163, chapter 513, laws of 1905, for the following reasons: *Birth is not recorded. (See letter.) Has no diploma and has not been baptized. Metropolitan Life Insurance Policy No. 35068, dated June 10, 1906, gives child's age at next birthday as 10 years, and this affidavit is, therefore, made in accordance with subdivision three of said section.*

Subscribed and sworn to before me this 3rd day of *Sept., 1914*.

ROSE JACKSON.

J. C. LYNCH.

To the Board of Health of Buffalo, N. Y.:

I hereby certify that I have investigated and examined all the facts and evidence submitted relative to the application of *John Jackson* for an employment certificate, and am satisfied that said child is entitled to such certificate, and, therefore, recommend that a certificate be granted.

J. C. LYNCH.

At a meeting of the Board of Health of Buffalo, N. Y., held on the 7th day of *Sept., 1914*, the following action was taken on the above application of *Rose Jackson* for employment certificate for *John Jackson*.
Certificate granted.

AUGUST SAWYER,
Secretary Board of Health.

[Buffalo Form 3. See p. 28.]

DEPARTMENT OF HEALTH,
THE CITY OF BUFFALO, N. Y.

APPLICATION FOR EMPLOYMENT CERTIFICATE AND FOR PHYSICIANS' CERTIFICATE OF AGE.

BUFFALO, N. Y., *Aug. 1, 1914*.

To the Department of Health, City of Buffalo, N. Y.

GENTLEMEN:

I, the undersigned, hereby make application for an employment certificate under the provisions of the labor law of the State of New York, to be issued to and in the name of *John Jardine*, the child of which I am the mother, and who resides at *9 E. Balcom Street*, in the City of Buffalo, N. Y.; and I hereby further make application for physicians' certificates.

JOHN JARDINE,
Signature of child.

ROSE JARDINE,
Signature of parent.

AFFIDAVIT.

STATE OF NEW YORK, CITY OF BUFFALO, COUNTY OF ERIE, ss:

Rose Jardine, being duly sworn, deposes and says:

That she is the applicant above named and resides at No. *9 E. Balcom Street*, in the City of Buffalo, N. Y.

Deponent is the parent mother of the child above named.

Deponent further says that the said child is *14* years of age; that he was born at *Amiens, France*, on the *16th* day of *July, 1900*, and that the present residence of said child is *9 E. Balcom St.*, Buffalo, N. Y.

This deponent, your petitioner for physicians' certificates, also alleges that she is unable to produce any of the evidence of age of said child above mentioned, specified in sections 71 and 163 of the labor law of the State of New York, namely:

- (a) Birth certificate;
- (b) Certificate of graduation;
- (c) Passport or baptismal certificate;
- (d) Other documentary evidence.

That the following facts are presented for the consideration of the officer to whom application is made for the issuance of an employment certificate, to assist in determining the age of said child, namely, *birth is not recorded. (See letter.) Has no diploma and has not been baptized; is not insured, and has no documentary evidence of any sort.*

[Buffalo Form 3 (reverse). See p. 23.]

That the school record filed herewith is the school record of the child above named, and deponent asks for the issuance of physicians' certificates on which, together with the said school record, an employment certificate may be issued in accordance with the labor law of the State of New York.

Sworn to before me this 1st day of *Aug., 1914*.

ROSE JARDINE.

J. C. LYNCH,
Signature of officer issuing certificate.

I hereby certify that the child above named was produced before me and is apparently at least fourteen years of age, and I hereby receive the foregoing application for physicians' certificates and file the same this date.

Dated Buffalo, N. Y., *Aug. 1, 1914*.

J. C. LYNCH.

Not less than ninety days having elapsed since the date of the filing of this application for physicians' certificates, and no facts appearing within such period nor after an examination of the statements contained in said application tending to discredit or contradict any material statement of such application,

I hereby direct the child named in said application to appear for physical examination before two physicians designated by the department of health.

Dated Buffalo, N. Y., Nov. 1, 1914.

J. C. LYNCH.

We, D. V. McClure, M. D., and J. A. Wahlz, M. D., physicians officially designated by the department of health, hereby certify that John Jardine, the child named in the within application, appeared this day before us for physical examination; and we hereby severally further certify that we have separately examined such child, and that in our opinion, the said child is at least fourteen years of age.

D. V. McCLURE, M. D.

J. A. WAHLZ M. D.

(In case the opinions of such physicians do not concur, the child shall be examined by a third physician, and the concurring opinion shall be conclusive for the purpose of the law as to the age of the child.)

[Along right margin, below printed matter:]

Application No. 2003.

PHYSICIANS' CERTIFICATE.

[Buffalo Form 4. See p. 32.]

TRANSCRIPT OF LABOR CERTIFICATE.

No. of transcript, 1000.

BUFFALO, N. Y., Nov. 12, 1914.

No. of employment certificate

Fee, \$1.00.

STATE OF NEW YORK, COUNTY OF ERIE, CITY OF BUFFALO, SS.

Florence Price being duly sworn deposes and says that she is the mother of Rose Price; that said child had an employment certificate; that according to my information and belief, said employment certificate was destroyed in the following manner:

Placed in the bottom of clothes basket and was put in water.

Subscribed and sworn to before me this 12th day of Nov., 1915.

J. LYNCH,
Officer issuing certificate.

[To right of stub:]

Fee, \$1.00.

TRANSCRIPT OF LABOR CERTIFICATE, DEPARTMENT OF HEALTH, BUFFALO, N. Y.

Nov. 12, 1914.

No. of transcript, 1000.

I HEREBY CERTIFY that the following is a true copy of the record of child labor certificate on file in the department of health of the city of Buffalo, N. Y., the original having been destroyed as per sworn statement filed this day.

FRANCIS E. FRONZAK, M. D.,
Health Commissioner.

Attest:

This certificate is effective throughout the State and until the owner is 16 years of age unless sooner revoked.
No.

EMPLOYMENT CERTIFICATE.

Issued pursuant to sections 71 and 163 of the labor law of the State of New York, chapter 36, Laws of 1909, as amended.

The department of health of Buffalo, N. Y., upon application duly made pursuant to law, grants this certificate to

Rose Price,
(Name of child.)

and it is hereby certified that this child, who is described below, personally appeared before the undersigned official and was by him examined and found qualified for employment under the labor law; it is further certified that documentary evidence of the age and education of said child, as required by law, has been duly examined, approved, and made a part of the records of the above department, and that by careful examination the physical fitness of the said child has been determined by the medical examiner of the above department and that such physical examination has been recorded as required by law.

Description of child.

Place of birth, Buffalo, N. Y.

Date of birth, Mar. 5, 1899.

Color of hair, Black.

Color of eyes, Brown.

Height, 5 feet 8 inches.

Weight, 88.

Distinguishing facial marks, Large mole.

ROSE PRICE,
Signature of child named in the above certificate.

THE HEALTH COMMISSIONER,
By J. LYNCH,
Signature of official issuing certificate.
Date Feb. 6, 1914.

N. B.—This certificate must be filed with the employer, and must be kept on file in the office at the place of employment during the period of such employment. It shall be surrendered to the child, its parent, guardian, or custodian upon the termination of the child's employment.

(OVER)

[Buffalo Form 4 (reverse). See p. 32.]

IMPORTANT.

NOTICE TO EMPLOYERS.

Factories: In factories the child presenting this certificate shall not be permitted to work before 8 o'clock in the morning or after 8 o'clock in the afternoon, or for more than 8 hours in any one day or more than six days in any one week. (Section 77, Labor Law.)

Special attention is called to occupations at which children can not be employed, enumerated in section 83, Labor Law.

Mercantile Establishments: In mercantile establishments the child presenting this certificate shall not be permitted to work before 8 o'clock in the morning or after 6 o'clock in the evening, or for more than 8 hours in any one day or more than six days in any one week. (Section 161, Labor Law.)

[Buffalo Form 5. See p. 71.]

Precinct.

BUFFALO SCHOOL CENSUS.

Block.

Name, *Mary Kelley.* Sex, *Female.*
 Month, day, and year of birth, *Feb. 15, 1902.* Address, *4 Prospect St.*
 Birthplace, *Buffalo.* School, *No. 7.*
 Defects, ... Color, *White.*

Employed? *No.* Employer's name, ...

Labor cert.?

How many years working?

Can read and write English? *Yes.*Patrolman's shield No. *17.*

Leave this
space blank.

Parent.

Name, *James Kelley.*Birthplace, *Ireland.*Years in U. S., *20.* Native language, *English.*

[Buffalo Form 6. See p. 72.]

Precinct, *5.*

BUFFALO SCHOOL CENSUS.

Name, <i>Mary Kelley.</i>		Sex, <i>Female.</i> Color, <i>White.</i>	Parent's name, <i>James Kelley.</i> Where born, <i>Ireland.</i> Years in U. S., <i>20.</i>		
Address, <i>4 Prospect St.</i>	School, <i>No. 7.</i>	Block, <i>94.</i>	Month, day, and year of birth, <i>Feb. 15, 1902.</i>	Where born, <i>Buffalo.</i>	Years in U. S.
Employer's name.	Employer's address.		Physical or mental defects, ... Read or write English, <i>Yes.</i> Other, <i>No.</i>		
			Truant report.	Remarks.	
Labor cert.	Enumerator, Shield No. <i>W. Brown. 17</i>				

[Buffalo Form 7. See p. 72.]

BUFFALO SCHOOL CENSUS.

I have this *4th* day of *June* 1916, moved *Thomas Ryan* from *27 Williams Avenue* to *43 Highland Avenue Street.*

By order of
F. F. KLINCK,
J. B. WALL,
 Police Commissioners.
M. REGAN,
 Supt. of Police.

JOHN L. BOWERS,
 Owner.

FORMS USED IN ADMINISTRATION.

161

[Buffalo Form 8. See p. 72.]

BUFFALO SCHOOL CENSUS.

Name, *Jane Brown.* School, *7.*
Age, *14.* Address, *14 Prospect St.*
Parent's name, *James Brown.*
Remarks, ...
Date, ...

[Buffalo Form 9 (postal card). See p. 76.]

School No. *8.*

Date, *April 15, 1915.*

The following person has been furnished to-day with attendance papers for the purpose of securing labor certificate:

Name, *Walter J. Blake.*
Address, *3 Dustin Place.*
Age, *14.* Day, month, and year of birth, *April 3, 1901.*
Parent's name, *Samuel K. Blake.*
Remarks, ...
Grade, ...

CORNELIUS PHARSON,
Principal.

Leave this space blank.

[Buffalo Form 10. See p. 76.]

BUFFALO SCHOOL CENSUS—CHILD-LABOR CERTIFICATE REPORT.

The following certificates were issued by the board of health during the week ending *June 7 1915.*

Child's name.	Address.	Age.	School.	Cert. No.
<i>Sarah Green.....</i>	<i>5 White St.....</i>	<i>14</i>	<i>No. 16.....</i>	<i>703</i>
<i>Charles Fowler.....</i>	<i>376 River St.....</i>	<i>15</i>	<i>" 3.....</i>	<i>704</i>
<i>Louis Poiriet.....</i>	<i>9 Riverside Ave.....</i>	<i>14</i>	<i>" 11.....</i>	<i>705</i>
.....				

Signed *WILLIAM B. DRAKE.*

[Rochester Form 1. See p. 41.]

OFFICE OF THE BOARD OF HEALTH.

STATE OF NEW YORK, COUNTY OF MONROE, CITY OF ROCHESTER, SS.

Mary Welch, being duly sworn, says that she is the ~~father, mother, guardian, duly appointed person~~ having legal custody and control of *Fred Welch*, an infant; that said infant is aged *14* years; was born at *Rochester*, in the State of *New York*, on the *22* day of *October*, *1899*.

That deponent makes this affidavit for the purposes mentioned in section 2 of chapter 409 of the Laws of 1896, as amended by chapter 991 of the Laws of 1896, and section 3 of chapter 384 of the Laws of 1896, regulating the employment of women and children in manufacturing and mercantile establishments.

MARY WELCH.

Subscribed and sworn to this *17* day of *June* *1900*, before me.

FLORENCE WEIS,
Commissioner of Deeds.

Extract from chapter 384 of Laws of 1896.

"It shall be unlawful for any notary public or other officer authorized and empowered by law to administer to any person an oath, to demand or receive a fee for taking or administering an oath, to a parent of, guardian of, or person in parental relation to any child as to the age of such child, where the affidavit thus taken is used or intended to be used for the purpose of obtaining a certificate as provided for in the foregoing section, from any board or department of health or health commissioner or commissioners as herein set forth."

[Stamped across face:]

This to certify that this child is 14 years of age or more.

46446°—17—11

No. 23. [Rochester Form 3. See p. 73.] Jan. 13, 1916.
SCHOOL CENSUS BOARD.

Name. <i>Wallace B. Scaggs.</i>		Nov. 7, '01.	Boy. In 7 n
Address. <i>14 White St.</i>		Born Mo. Day. Year.	
Parent's name. <i>Horace L. Scaggs.</i>		Left <i>Peabody</i> School at the <i>6</i> Grade.	
Not attending.	Home N. W. C.	Unlawful absence.	No. W. C.
Employed by <i>White & Co.</i>			
Kind of work of child. <i>Messenger.</i>		Reported to <i>Doyle.</i>	
Remarks. <i>Required to obtain certificate.</i>			
Disposition.			

Signed *ALLEN ROWLEY.*

No. 3. [Rochester Form 4 (postal card). See p. 77.]
REPORT ON CHANGE OF ADDRESS WITHIN DISTRICT AND ISSUING SCHOOL RECORD.

ROCHESTER, N. Y., Jan. 15, 1916.

School No. *17.* Grade. *7.* Teacher, *Mary Tompkins.*
Name, *Susan Kennedy.*
New address.
Former address.
Date of birth, *February 16, 1900.*
Month. Day. Year.
Date school record issued, *Jan. 12, 1915.*
Pupil *will* (will not) remain in school.
N. B.—Send permanent record card to efficiency bureau if pupil obtaining school record leaves school.

[Utica Form 1. See p. 30.]

DEPARTMENT OF PUBLIC SAFETY,
CITY OF UTICA, N. Y.,
BUREAU OF HEALTH.

APPLICATION FOR EMPLOYMENT CERTIFICATE, MANUFACTURING, MERCANTILE, AND OTHER ESTABLISHMENTS
To the Health Officer, City of Utica.

Application is hereby made for an employment certificate for

Mary Evans.

Address, *80 Canal St.*

MARY EVANS.
Signature of child.

LENA EVANS.
Signature of parent, guardian, or custodian.
Address, *80 Canal St.*

AFFIDAVIT.

STATE OF NEW YORK, ONEIDA COUNTY, ss.

Lena Evans, being duly sworn, says that she is ~~father~~ mother, guardian of *Mary Evans;* that the said *Mary Evans* was born at *Cudasia, N. Y.,* on the *16th* day of *February,* 1898, and that she is *14* years of age.

Sworn to before me this *18th* day of *June,* 1912.

LENA EVANS.

CHAS. L. PRINGLE,
Commissioner of Deeds in and for the City of Utica, N. Y.
[OVER]

[Utica Form 1 (reverse). See p. 30.]

STATEMENT OF OFFICER ISSUING THIS CERTIFICATE.

I hereby certify:

1. That the following papers relating to the above-named child have been filed in this office.
 - (a) Its school record filled out and signed as required by law.
 - (b) Affidavit (its passport or a transcript of its birth certificate or baptismal certificate or a religious record showing its date and place of birth.)
 - (c) Affidavit of the parent, guardian, or custodian of the child, showing the place and date of its birth.
- That said child has appeared before me and has been examined.

CHAS. L. PRINGLE,
Signature of officer issuing the certificate.

[Albany Form 1. See p. 63.]

OFFICE OF THE
SUPERINTENDENT OF PUBLIC SCHOOLS,
ALBANY, N. Y., April 1, 1910.To George W. Barrows,
25 So. Main St.

Your attention is respectfully called to the following extract from the act of the Legislature of the State of New York, entitled "An act to provide for the compulsory education of children," passed May 23, 1906, as amended by chapter 140 of the Laws of 1910.

EXTRACT FROM THE LAW.

§ 626. Unlawful employment of children and penalty therefor. It shall be unlawful for any person, firm, or corporation:

1. To employ any child under 14 years of age, in any business or service whatever, for any part of the term during which the public schools of the district or city in which the child resides are in session.

2. To employ, elsewhere than in a city of the first class or a city of the second class, in a factory or mill, in a cantile establishment, business or telegraph office, restaurant, hotel, apartment house, or in the distribution or transmission of merchandise or messages, any child between 14 and 16 years of age who does not at the time of such employment present an employment certificate duly issued under the provisions of the labor law, or to employ any such child in any other capacity who does not at the time of such employment present a school-record certificate as provided in section 630 of this chapter.

3. To employ any child between 14 and 16 years of age in a city of the first class or a city of the second class who does not, at the time of such employment, present an employment certificate, duly issued under the provisions of the labor law.

§ 627. Employer must display record certificate and evening certificate. The employer of any child between 14 and 16 years of age in a city of the first class or a city of the second class shall keep and display in the place where such child is employed, the employment certificate and also his evening certificate issued by the school authorities of said city or by an authorized representative of such school authorities, certifying that the said boy is regularly in attendance at an evening school of said city as provided in section 631 of this chapter.

§ 628. Punishment for unlawful employment of children. Any person, firm, or corporation, officer, manager, superintendent or employee acting therefor, who shall employ any child contrary to the provisions of section 626 hereof, shall be guilty of a misdemeanor, and the punishment therefor shall be the first offense a fine of not less than \$20 nor more than \$50; for a second and each subsequent offense a fine of not less than \$50 nor more than \$200.

Please record the names of all children between the ages of fourteen and sixteen years, employed by your establishment, on this paper, and mail the same to

C. EDWARD JOHNS,
Superintendent of Public Schools, Albany, N. Y.

1 So in original.

Name.	Age.	Residence.	Employment certificate (yes or no).
Sarah Graham	15	10 North Ave.	Yes.
James Brewster	14	131 Auburn St.	Yes.
Herman Schultz	16	77 Arlington St.	Yes.
.....			

Respectfully submitted.

(Sign here) GEORGE W. BARROWS

Albany Form 1 (reverse). See p. 63.]

Children employed

By

.....
 191..
 =====

[Albany Form 2 (postal card). See p. 62.]

Evening School No. 5.

ALBANY, N. Y., Jan. 25, 1910.

Herman Schultz, reported as being in your employment, was absent from school last night. Your cooperation in the administration of the compulsory law relative to attendance at evening school is earnestly desired.

C. EDWARD JOHNS,
Supt. Sch.
W. Johns,
Principal Evening School No. 5.

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, CHIEF

LIST OF REFERENCES ON
CHILD LABOR

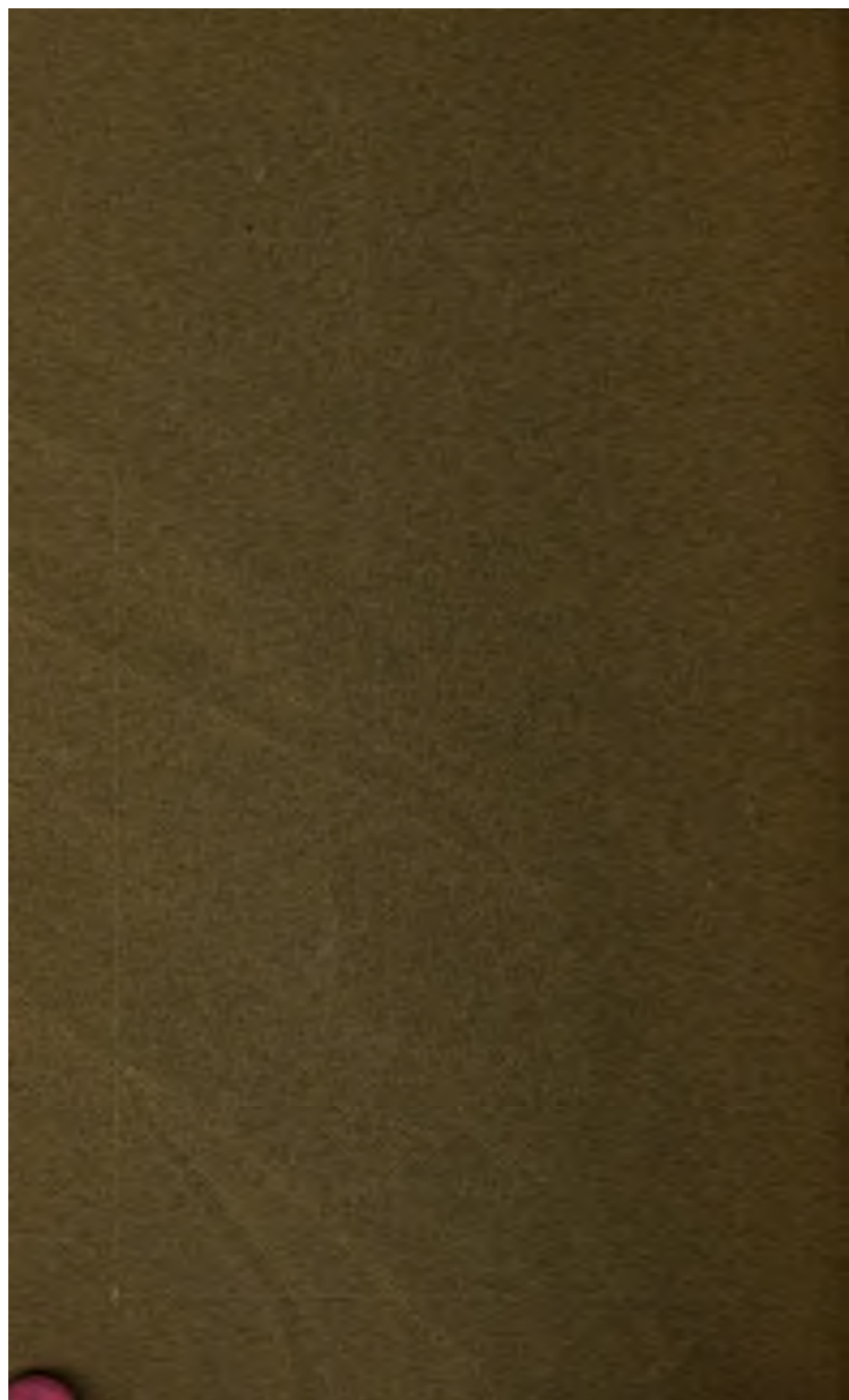
COMPILED UNDER THE DIRECTION OF
H. H. B. MEYER
CHIEF BIBLIOGRAPHER, LIBRARY OF CONGRESS
WITH THE ASSISTANCE OF
LAURA A. THOMPSON
LIBRARIAN, CHILDREN'S BUREAU

3

INDUSTRIAL SERIES No. 3
Bureau Publication No. 18



WASHINGTON
GOVERNMENT PRINTING OFFICE
1916



U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

LIST OF REFERENCES ON
CHILD LABOR

COMPILED UNDER THE DIRECTION OF
H. H. B. MEYER
CHIEF BIBLIOGRAPHER, LIBRARY OF CONGRESS
WITH THE ASSISTANCE OF
LAURA A. THOMPSON
LIBRARIAN, CHILDREN'S BUREAU

INDUSTRIAL SERIES No. 3
Bureau Publication No. 18



WASHINGTON
GOVERNMENT PRINTING OFFICE
1916

	Page.
Industries—Continued.	
Textiles.....	101-105
Miscellaneous industries.....	106-107
Stage.....	107-108
Street trades.....	109-116
Educational aspects.....	117-132
Juvenile occupations and Employment bureaus.....	133-136
Health of working child.....	136-141
Author index.....	143-152
Subject index.....	153-161

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, June 30, 1916.

SIR: Herewith I transmit a list of references on child labor.

The first edition of this list was compiled by Mr. A. P. C. Griffin and was published by the Library of Congress in 1906. This second edition was begun in 1914, under the direction of Mr. H. H. B. Meyer, chief bibliographer of the Library of Congress, but the material was transferred to the Children's Bureau because the Library of Congress was committed to the completion of certain larger publications, which made it impracticable for the Library to publish this list at present.

Miss Laura A. Thompson, librarian of the Children's Bureau, has assisted in the preparation of the list, but the great bulk of the work has been done by the Library of Congress.

The Children's Bureau wishes to express its appreciation of the privilege of being associated with the Library of Congress in this publication.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

Hon. WILLIAM B. WILSON,
Secretary of Labor.

NOTE.

The reports of the State bureaus of labor and the reports of the departments of factory inspection have been included only where a special investigation has been made or where special statistics have been given. Most of the reports of the bureaus of labor contain statistics of children employed and reference to the inspection of child labor where there is no special department of factory inspection. No reference has been made to the child-labor laws as found in these or similar reports, as these are covered by the compilation made by the Children's Bureau. (See No. 577 in this list.)

The numbers at the end of the titles are the shelf numbers of the books in the Library of Congress.

LIST OF REFERENCES ON CHILD LABOR.

BIBLIOGRAPHIES.

CHILD LABOR.

- 1 **Bloomfield, Meyer.** The school and the start in life; a study of the relation between school and employment in England, Scotland, and Germany. Washington, Govt. print. off., 1914. 143 p. 23^{cm}. (U. S. Bureau of education, Bulletin, 1914, no. 4. Whole no. 575.) HF5381.B5
Bibliography: p. 133-142.
- 2 **British association for labour legislation.** Child labour in the United Kingdom. A study of the development and administration of the law relating to the employment of children. By Frederic Keeling. London, P. S. King & son, 1914. xxxii, 326 p. 25^{1/2}^{cm}. HD6250.G7B75
"Bibliography of the employment of children in the United Kingdom": p. [309]-319.
- 3 **Bullock, Edna Dean, comp.** Selected articles on child labor. 2d and enl. ed. White Plains, N. Y., and New York city, The H. W. Wilson company, 1915. xxvi, 238 p. 20^{cm}. (Debaters' handbook series) HD6250.U3B85 1915
Bibliography: p. [xj]-xxvi.
- 4 **Clopper, Edward Nicholas.** Child labor in city streets. New York, The Macmillan co., 1912. ix, 280 p. 18^{cm}. HD6231.C5
Bibliography: p. 245-254.
- 5 **Freeman, Arnold.** Boy life & labour; the manufacture of inefficiency. London, P. S. King & son, 1914. 252 p. 22^{cm}. HD6250.G75B5
"Bibliography of juvenile labour": p. 233-246.
- 6 **Keeling, Frederic.** The labour exchange in relation to boy and girl labour. London, P. S. King & son, 1910. 76 p. 21^{cm}.
Bibliography: p. 73-76.
- 7 **Massachusetts. Bureau of statistics.** Industrial home work in Massachusetts . . . Boston, Wright & Potter print. co., 1914. 183 p. 23^{cm}. (Its Labor bulletin no. 101) HC107.M4A3,no.101
Bibliography: p. 152-177.
- 8 ——— Labor bibliography. 1912-1914. Boston, 1913-1915. 3 v. 23^{1/2}^{cm}. Z7164.L1M4
Found also in Annual report on the statistics of labor, 1912, 1914, 1915.
1912: Child labor: p. 7-9. 1913: Child labor: p. 4-40. 1914: Child labor: p. 6-9.
- 9 **Tennessee. State library, Nashville. Legislative reference dept.** Index of legislative reference material. Nashville, Tenn., McQuiddy printing company, 1915. 85 p. 22^{cm}. Z7161.T38
Child labor: p. 67-69.
- 10 **Texas. University. Dept. of extension. Public discussion and information division.** Compulsory education and child labor. Austin, Tex., University of Texas [1910] 11 p. 23^{cm}. (Bulletin of the University of Texas. Extension ser.) Z7161.T45,no.7a

- 11 **U. S. Bureau of labor statistics.** Subject index of the publications of the United States Bureau of labor statistics up to May 1, 1915. September, 1915. Washington, Govt. print. off., 1915. 233 p. 23½^{cm}. (Bulletin of the United States Bureau of labor statistics, whole no. 174. Miscellaneous series, no. 11)
Z1223.L184
Children in industry: p. 43-45.
- 12 ——— **Library of Congress. Division of bibliography.** List of books (with references to periodicals) relating to child labor. Comp. under the direction of Appleton Prentiss Clark Griffin, chief bibliographer. Washington, Govt. print. off., 1906. 66 p. 25½^{cm}.
Z881.U5

RELATED SUBJECTS.

APPRENTICESHIP.

- 13 **Bray, Reginald Arthur.** Boy labour and apprenticeship. London, Constable & co., 1911. xi, 248 p. 19^{cm}.
"List of authorities": p. 241-244.
- 14 **Dunlop, Olive Jocelyn, and Richard D. Denman.** English apprenticeship & child labour; a history, by O. J. Dunlop, with a supplementary section on the modern problem of juvenile labour, by O. J. Dunlop and R. D. Denman. London [etc.] T. F. Unwin, 1912. 390 p. 23^{cm}.
HD4885.G7D8
Bibliography: p. 335-363.
- 15 **Wright, Carroll Davidson.** The apprenticeship system in its relation to industrial education. Washington, Govt. print. off., 1908. 116 p. 23^{cm}. (U. S. Bureau of education. Bulletin, 1908, no. 6)
L111.A6,1908,no6
"List of references relating to the education of apprentices": p. 87-92.

COMPULSORY EDUCATION.

- 16 **Compulsory school attendance.** Washington, Govt. print. off., 1914. 137 p. 23^{cm}. (U. S. Bureau of education. Bulletin, 1914, no. 2. Whole no. 573)
L111.A6,1914,no.2
Bibliography of compulsory education in the United States: p. 131-134.

EIGHT-HOUR DAY.

- 17 **U. S. Library of Congress. Division of bibliography.** List of books, with references to periodicals, relating to the eight-hour working day and to limitation of working hours in general. Comp. under the direction of Appleton Prentiss Clark Griffin, chief bibliographer. Washington, Govt. print. off., 1908. 24 p. 25½^{cm}.
Z881.U5

INDUSTRIAL EDUCATION.

- 18 **Brundage, Howard D., and Charles B. Richards.** A selected bibliography on industrial education. (*In* National education association. Journal of proceedings and addresses, 1910. Winona, Minn., 1910. p. 766-773.)
L13.N4 1910
- 19 **Columbia university. Teachers college. School of industrial arts.** Annotated list of books relating to industrial arts and industrial education. New York city, Teachers college, Columbia university, 1911. 50 p. 23^{cm}. (Technical education bulletin, no. 6)
Z7911.C73
- 20 **Dean, Arthur Davis.** The worker and the state; a study of education for industrial workers. New York, The Century co., 1910. 355 p. 20^{cm}.
"Bibliography of vocational education": p. 345-355.
- 21 **Kansas City, Mo. Public library.** A reading list on vocational education. Kansas City, Mo., Kansas City public library, 1915. 44 p. 16½ x 9^{cm}. (Special library list. no. 10)
Z5814.T4K2

- 22 **Lapp, John A., and Carl H. Mote.** Learning to earn; a plea and a plan for vocational education. Indianapolis, The Bobbs-Merrill company, [1915] 9 p. l., 421 p. 19½^{cm}. LC1045.L3
Bibliography: p. [379]-389.
"Organizations interested in vocational training": p. [391]-394.
- 23 **New York (State). Department of labor.** A selected bibliography on industrial education. (*In its Annual report.* 8th, 1907-08. Albany, 1909. p. 357-394) HD8053.N7A2,pt.3
- 24 — **Education dept. Division of vocational schools.** A list of helpful publications concerning vocational instruction. Prepared by Lewis A. Wilson. Albany, The University of the state of New York, 1914. 41 p. 23^{cm}. (University of the state of New York bulletin. no. 569) Z7911.N52
- 25 **Richards, Charles R.** Selected bibliography on industrial education. [Asbury Park, N. J., Kinmonth press] 1907. 32 p. 23^{cm}. (National society for the promotion of industrial education. Bulletin no. 2) T61.N27,no.2
- 26 **Sadler, Michael Ernest.** Continuation schools in England & elsewhere; their place in the educational system of an industrial and commercial state. 2d ed. Manchester, University press, 1908. 779 p. 23^{cm}. (Publications of the University of Manchester. Educational series, no. 1) LC5215.S25
"Short bibliography": p. 750-754.
- 27 **U. S. Bureau of education.** Bibliography of industrial, vocational, and trade education. Washington, Govt. print. off., 1913. 92 p. 23^{cm}. (*Its Bulletin*, 1913, no. 22. Whole no. 532) LC1043.U6
- 28 — **Bureau of labor.** Industrial education. Washington, Govt. print. off., 1911. 822 p. 23^{cm}. (Annual report of the commissioner of labor. 25th. 1910) HD8051.A3 1910
"Selected bibliography on industrial education": p. 519-539.

INDUSTRIAL HYGIENE.

- 29 **Bibliography on industrial hygiene.** Trial list of references on occupational diseases and industrial hygiene prepared by the American association for labor legislation, United States Bureau of labor [and] Library of Congress. American labor legislation review, June, 1912, v. 2: 367-417. HD7833.A55,v.2
- 30 **Rambousek, Josef.** Industrial poisoning from fumes, gases and poisons of manufacturing processes; . . . tr. and ed. by Thomas M. Legge. London, E. Arnold, 1913. xiv, 360 p. illus. 22^{cm}. HD7263.R4
"References": p. 339-354.
- 31 **U. S. Bureau of labor statistics. Library.** Books and periodicals on accident and disease prevention in industry in the library of the Bureau of labor statistics. [Washington, Govt. print. off., 1916] 23 p. 23½^{cm}. Z7164.L1U667
- 32 — **Surgeon-general's office. Library.** Occupations and trades (Diseases and hygiene of). (*In its Index catalogue.* Washington, 1881-1916. 1st ser. v. 10, p. 67-83; 2d ser. v. 5, p. 481-482, v. 12, p. 69-74) Z6676.U6
References to current material will be found in the Index medicus. Z6680.14

MINIMUM WAGE.

- 33 **New York. Public library.** The minimum wage; a preliminary list of selected references. New York, 1913. 9 p. 26½^{cm}. Z7164.W1N5
Prepared by C. C. Williamson.
"Reprinted at the New York public library from the Bulletin, August, 1913."

- 34 **Reeder, Charles Wells.** Bibliography on the minimum wage. (*In Ohio Industrial commission. Dept. of investigation and statistics. Report, no. 1. Columbus, O., 1914. 24^{cm}. p. 23-33*) HD8053.O3A3,no.1
- 35 **Ryan, John Augustine.** A living wage; its ethical and economic aspects. New York, London, The Macmillan co., 1912. 346 p. 19^{cm}. (The Macmillan standard library) HB301.R98
"Works of reference": p. 333-340.
- 36 **Verrill, Charles Henry.** Minimum-wage legislation in the United States and foreign countries. Washington, Govt. print. off., 1915. 335 p. 23^{cm}. (Bulletin of the United States Bureau of labor statistics, whole no. 167. Miscellaneous series, no. 8) Z7164.W1V3
Issued also as House doc. 1476, U. S., 63d Cong., 3d sess.
A select list of references to books and periodicals (In English) on the minimum wage: p. 321-328.
- 37 **Williamson, Charles C.** A list of selected references on the minimum wage. (*In New York (State). Factory investigating commission. Third report, 1914. Albany, 1914. 23^{cm}. Legislature, 1914. Assembly doc. 28. p. 383-413*) HD8053.N7A5 1914

MOTHERS' PENSIONS.

- 38 **Meyer, H. H. B.** Select list of references on pensions for mothers, motherhood insurance, etc. (*In Special libraries, Nov. 1913, v. 4: 177-183.*) Z671.S71,v.4
- 39 **New York (State) Commission on relief for widowed mothers.** A bibliography of mothers' pensions. (*In its Report. 1914. Albany, 1914. 23^{cm}. Legislature, 1914. Senate doc. 64. p. 570-577*) HV699.N52
- 40 **U. S. Children's bureau.** Laws relating to "Mothers' pensions" in the United States, Denmark and New Zealand. Washington, Govt. print. off., 1914. 102 p. 25^{cm}. (Dependent children series, no. 1. Bureau publication no. 7) HV697.U5
Prepared by Miss Laura A. Thompson, Librarian of the Bureau.
"List of references on 'Mothers' pensions'": p. 98-102.

VOCATIONAL GUIDANCE.

- 41 **Bloomfield, Meyer.** Youth, school, and vocation. Boston, New York [etc.] Houghton Mifflin co. [1915]. 273 p. 19⁴cm. HF5381.B63
Bibliography: p. 262-267.
- 42 **Brooklyn. Public library.** Choosing an occupation; a list of books and references on vocational choice, guidance, and training, in the Brooklyn public library. Brooklyn, N. Y., The Brooklyn public library, 1913. 63 p. 19^{cm}. Z5814.T4B3
- 43 **Chicago school of civics and philanthropy.** Dept. of social investigation. Finding employment for children who leave the grade schools to go to work; report to the Chicago woman's club, the Chicago association of collegiate alumnae, and the Woman's city club. [Chicago, Manz engraving company, The Hollister press, 1911] 56 p. 26^{cm}. HF5381.C6
Selected bibliography relating to employment supervision, p. 53-56.
- 44 **Hall, Mary E.** Vocational guidance through the library . . . with select bibliography by John G. Moulton. Chicago, American library association publishing board, 1914. 22 p. 19⁴cm. Z7164.C81H2
Reprinted from the Massachusetts library club bulletin, January, 1914.

- 45 **Jacobs, Charles Louis, comp.** A vocational guidance bibliography, prepared for school and public libraries and arranged especially for youths, teachers, and specialists. Comp. for the commissioner of industrial and vocational education, by C. L. Jacobs. Jan. 1916. [Sacramento] California state print. off., 1916. 24 p. 22½^{cm}. (California. State board of education. Bulletin no. 12)
- 46 **New York (State) Education dept. Division of vocational schools.** A list of helpful publications concerning vocational instruction. Prepared by Lewis A. Wilson. Albany, The University of the state of New York, 1914. cover-title, [3]-41 p. 23^{cm}. (University of the state of New York bulletin. no. 569) Z7911.N52
- 47 **Parsons, Frank.** Choosing a vocation. Boston and New York, Houghton Mifflin company, 1909. 165, [1] p. incl. tables. 21^{cm}. HF5381.P24
Bibliography: p. 106-110.
- 48 **Philadelphia. Board of public education. Pedagogical library.** A working library on vocational guidance, with some additional titles on vocational education. [Philadelphia, Philadelphia trades school, 1913] 12 p. 23^{cm}. (Library bulletin no. 2) Z5811.P45,no.2
- 49 **U. S. Bureau of education. Library.** List of references on vocational guidance, June, 1914- [Washington, 1914-] 23^{cm}. Z7164.C81U5
Supplementary editions pub. irregularly.

UNITED STATES AND GENERAL.*

- 50 **Abbott, Edith.** A study of the early history of child labor in America. American journal of sociology, July, 1908, v. 14: 15-37. HM1.A7,v.14
- 51 ——— Women in industry; a study in American economic history. New York and London, D. Appleton and company, 1910. xxii, 408 p., 1 l. incl. tables. 20½^{cm}. HD6095.A2
Child labor in America before 1870, p. 327-351.
- 52 **Abeledorff, Walter.** Frauen- und kinderarbeit in den Vereinigten Staaten von Nordamerika. Leipzig, 1914. p. 166-206. 22½^{cm}.
"Sonder-abdruck aus dem Archiv für soziale hygiène und demographie, 9. bd., 2. hft."
- 53 **Abolition of child labor possible.** Journal of education, Feb. 18, 1915, v. 81: 182. L11.J5,v.81
- 54 **Adams, Thomas Sewall, and Helen L. Sumner.** Labor problems; a text book. New York, London, The Macmillan company, 1905. xv, 579 p. 21^{cm}. HD8072.A25
Bibliography: p. 15-16.
Woman and child labor, by H. L. S.: p. 19-67. -Appendix A. Woman and child labor laws in the United States.
- 55 **Addams, Jane.** Child labor. (In National education association. Journal of proceedings and addresses, 1905. Winona, Minn., 1905. 23½^{cm}. p. 259-261) L13.N4 1905
- 56 ——— Child labor and pauperism. (In National conference of charities and correction. Proceedings, 1903. [Columbus, O.] 1903. 23½^{cm}. p. 114-121) HV88.A3 1903
- 57 ——— Child labor legislation, a requisite for industrial efficiency. American academy of political and social science, Annals, May, 1905, v. 25: 542-550. H1.A4,v.25
National child labor committee. Pamphlet no. 2, p. 130-138. HD6250.U3N2 no.2
National child labor committee. Pamphlet no. 13, 9 p. HD6250.U3N2,no.13

* For individual states see Subject index.

- 58 **Addams, Jane.** Democracy and social ethics. New York, The Macmillan company [etc., etc.] 1902. ix, 281 p. 19 $\frac{1}{2}$ ^{cm}. (The citizen's library of economics, politics, and sociology, ed. by R. T. Ely) HN64.A2
Child labor, p. 40-46, 167-170; Educational methods, p. 187-220.
- 59 ——— National protection for children. American academy of political and social science, Annals, Jan. 1907, v. 29: 57-60. H1.A4,v.29
National child labor committee, Pamphlet no. 47. 4 p. HD6250.U3N2,no.47
- 60 ——— Newer ideals of peace. New York, London, The Macmillan company, 1907. xviii, 243 p. 19^{cm}. (The citizen's library of economics, politics, and sociology, ed. by R. T. Ely) HN64.A25
Protection of children for industrial efficiency, p. 151-179.
- 61 ——— A plea for more play, more pay, and more education for our factory girls and boys. [Chicago?] Printed for private distribution [the Chicago association of commerce, 1914?] 24 p. 17 $\frac{1}{2}$ ^{cm}. HQ796.A25
- 62 ——— The spirit of youth and the city streets. New York, The Macmillan company, 1909. 162 p. 19 $\frac{1}{2}$ ^{cm}. HQ796.A3
The spirit of youth and industry, p. 107-135.
- 63 ——— Ten years experience in Illinois. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 114-148. H1.A4,v.38
- 63a ——— What does child labor reform cost the community. National child labor committee. Pamphlet no. 155. 6 p. HD6250.U3N2, no.155
- 64 **Adler, Felix.** The attitude of society toward the child as an index of civilization. American academy of political and social science, Annals, Jan. 1907, v. 29: 135-141. H1.A4,v.29
National child labor committee. Pamphlet no. 56. 7 p. HD5250.U3N2,no.56
- 65 ——— The basis of the anti-child labor movement in the idea of American civilization. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 1-3. H1.A4,v.32
National child labor committee. Pamphlet no. 70. 3 p. HD6250.U3N2,no.70
- 66 ——— Child labor a menace to civilization. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 1-7. H1.A4,v.38
National child labor committee. Pamphlet no. 156. 8 p. HD6250.U3N2,no.156
- 67 ——— Child labor in the United States and its great attendant evils. American academy of political and social science, Annals, May, 1905, v. 25: 417-429. H1.A4,v.25
National child labor committee. Pamphlet no. 2, p. 1-17; Pamphlet no. 11. 2d ed. 1907. 13 p. HD6250.U3N2,no.2;no.11
Same. (In Louisiana. Bureau of statistics of labor. Report. New Orleans, La. 1906. 23^{cm}. p. 16-26) HC107.L8A2 1904-05
- 68 **Adler, Nettie.** Child employment and juvenile delinquency. (In Woman in industry from seven points of view. London, 1908. p. 121-141) HD6053.W7
- 69 **Alabama.** Dept. for inspection of jails, almshouses, cotton mills, factories, etc. Children eligible for employment in the mills, factories, and manufacturing establishments in the state of Alabama for the year 1913. W. H. Oates, M. D., inspector. Montgomery, Ala., Brown printing company [1913]. 41 p. 23^{cm}. HD6250.U4A3 1913

- 70 **Alabama. Department for inspection of jails, almshouses, cotton mills, factories, etc.** Children ineligible for employment in the mills, factories, and manufacturing establishments in the state of Alabama. W. H. Oates, M. D., inspector. Montgomery, Ala., Brown printing company [1913]. 30 p. 23^{cm}. HD6250.U4A3 1913a
- 71 ———— Copies of reports of Dr. Bragg, inspector of jails, cotton mills, and almshouses. To the governor, July, 1907. Montgomery, Ala., Brown printing co. [1907] 15 p. 23^{1/2}cm. HD3663.A2A5 1907
- 72 ———— **Governor, 1915— (Charles Henderson)** Message to the Legislature of Alabama. Jan. 18, 1915. Montgomery, Brown printing co., 1915. 47 p. 23^{cm}. J87.A22 1915 Jan.18a
Child labor: p. 43-44.
- 73 **Alabama child labor committee.** Child labor in Alabama; an appeal to the people and press of New England, with a resulting correspondence. Letters from Mr. J. Howard Nichols and Mr. Horace S. Sears, of Boston, and from Edgar Gardner Murphy, of Montgomery, Alabama, in relation to the child labor bill. [n. p., 1901?] 40 p. 15^{1/2}cm.
- 74 **American academy of political and social science.** Social legislation and social activity. New York, Published for the American academy of political and social science of Philadelphia, by McClure, Phillips & company, 1902. vii, 304 p. 25^{cm}. HD8057.A5
Pt. IV. The child labor problem: Child labor legislation, by Mrs. Florence Kelley. Child labor in the department store, by F. N. Brewer. Necessity for factory legislation in the South, by H. Robbins. Child labor in New Jersey, by H. F. Fox. Child labor in Belgium, by E. Dubols.
- 75 **Armstrong association of Philadelphia.** A comparative study of the occupations and wages of the children of working age in the Potter and Durham schools, Philadelphia. [Philadelphia, Printed by pupils at the Philadelphia trades school] 1913. 20 p. 23^{cm}. HD6250.U5P4
- 76 **Aronovici, Carol.** The Newport survey of social problems. [Fall River, Mass., Munroe press, 1912] cover-title, 59 p. incl. tables. 26^{cm}. HN80.N67A7
Boy problem: Occupations, wages, unemployment, p. 3-4; Girl problem: Employment, p. 6, 42-43.
- 77 **Atherton, Sarah H.** Survey of wage-earning girls below sixteen years of age in Wilkes-Barre, Pennsylvania, 1915. New York city, National consumers' league [1915] 65 p. 23^{1/2}cm. (Women in industry series no. 11)
- 78 **Bailey, Mrs. E. L.** Conditions of child employing industries in the South: Mississippi. Child labor bulletin, v. 2, no. 1: 128-133. HD.6250.U3N4,v.2.
- 79 **Baldwin, B. J.** History of child labor reform in Alabama. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 111-113. H1.A4,v.38
- 80 **Barnard, Kate.** The new state and its children. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 173-175. H1.A4,v.32
- 81 ———— Through the windows of destiny: how I visualized my life work. Good housekeeping, Nov. 1912, v. 55: 600-606. TX1.G7,v.55
Child labor banished from Oklahoma, p. 602.
- 82 **Blascoer, Frances.** The industrial condition of women and girls in Honolulu; a social study. Honolulu [Paradise of the Pacific printers] 1912. 99, [1] p. 23^{1/2}cm. (Honolulu social survey, 1st study) HD6220.Z6H62
- 83 **Boswell, Helen Varick, chairman.** Industrial and child labor committee. Federation bulletin, Mar. 1909, v. 6: 165-166. HQ1871.F3,v.6
- 84 ———— Industrial conditions and child labor. Federation bulletin, Oct. 1909, v. 7: 18-19. HQ1871.F3,v.7

- 85 **Beeswell, M. Louise.** Child labor and need. Child labor bulletin, v. 2, no. 1: 17-26. HD6250.U3N4,v.2
National child labor committee. Pamphlet no. 194, 1913. 11 p. HD6250.U3N2,no.194
- 86 **Bowen, Louise Haddock (de Koven)** "Mrs. J. T. Bowen." Safeguards for city youth at work and at play. New York, The Macmillan co., 1914. 241 p. 19½^{cm}. HV1437.C4B6
Legal protection in industry: p. 52-93.
- 87 **Britton, James A.** Child labor and the juvenile court. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 111-115. H1.A4,v.33
National child labor committee. Pamphlet no. 95. 5 p. HD6250.U3N2,no.95
- 88 **Brooks, John Graham.** Past and present arguments against child labor. American academy of political and social science, Annals, Mar. 1906, v. 27: 281-284. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 23-26; Pamphlet no. 24. 4 p. HD6250.U3N2,no.20,no.20a,no.24
- 89 ——— The social unrest; studies in labor and socialist movements. New York, The Macmillan company; [etc., etc.] 1903. 4 p. l., 394 p. 20½^{cm}. HN64.B9
Child labor, p. 27-29, 207-208, 252-257.
- 90 **Brown, Edward F.** The neglected human resources of the Gulf coast states. Child labor bulletin, v. 2, no. 1: 112-116. HD6250.U3N4,v.2
- 91 **Bullock, Edna Dean, comp.** Selected articles on child labor. 2d and enl. ed. White Plains, N. Y., and New York city, The H. W. Wilson company, 1915. xxvi, 238 p. 20^{cm}. (Debaters' handbook series) HD6250.U3B85 1915
- 92 **Butler, Elizabeth Beardale.** Sharpsburg: a typical waste of childhood. (In Wage-earning Pittsburgh. New York, 1914, p. 279-304) HD8085.P6P6
"The working children": p. 287-302.
- 93 **California. Bureau of labor statistics.** Child labor. (In its Report, 1911-12, p. 21-88, 521-529; 1913-14, p. 20-21, 41-45) HC107.C2A2
- 94 ——— Industrial welfare commission. Biennial report. 1st, 1913-1914. [Sacramento?] 1915. 1 v. 22½^{cm}. HD6093.C2
- 95 **Campbell, M. Edith.** State child labor relief. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 80-84. H1.A4,v.38
- 96 Can Georgia do it? Outlook, Aug. 15, 1914, v. 107: 888-889. AP2.08,v.107
- 97 **Carlton, Frank Tracy.** The history and problems of organized labor. Boston, New York [etc.] D. C. Heath & company [c1911] xi, 483 p. 20^{cm}. HD6508.C2
Child labor: p. 379-407.
- 98 ——— The industrial situation; its effect upon the home, the school, the wage earner and the employer. New York, Chicago [etc.] Fleming H. Revell company [c1914] 159 p. 19½^{cm}. HD6072.C26
Women and children in industry: p. 78-92.
- 99 **Catheron, Allison G.** The Massachusetts committee on social welfare. Survey, Oct. 11, 1913, v. 31: 47-48. HV1.C4,v.31
- 100 **Chicago.** Child welfare exhibit, 1911. The child in the city; a handbook of the Child welfare exhibit at the Coliseum, May 11-May 25, 1911. [Chicago, The Blakely printing co., 1911] 96 p. illus. 25½^{cm}. HQ741.C6
Saving the barren years, p. 25-27.

- 101 **Chicago. Child welfare exhibit, 1911.** The child in the city; a series of papers presented at the conferences held during the Chicago child welfare exhibit, pub. by the Department of social investigation, Chicago school of civics and philanthropy. [Chicago, Manz engraving company, The Hol-lister press] 1912. xiii, 502 p. plates. 22^{cm}. HV741.C4
 Part V.—The working child: The standard for factory inspection in Illinois, by Mary E. Mc-Dowell: p. 273-277; Efficiency in factory inspection, by Florence Kelley: p. 278-288; The Illinois department of factory inspection, by Edgar T. Davies: p. 287-289; The street trader under Illinois law, by Florence Kelley: p. 290-301; The artist child, by S. H. Clark: p. 302-309; The effect of irregular hours upon the health of the child, by F. S. Churchill: p. 310-312.
- 102 **Child labor conference. Hartford, Conn., 1908.** Report of the proceedings of the Child labor conference held at Hartford, December 4, 1908. [Hartford, Printed by the state] 1909. cover-title, 44 p. 22^{cm}. HD6250.U4C8 1908
 Held under the auspices of the Consumers' league of Connecticut.
 From 29d annual report Connecticut Bureau of labor statistics.
 CONTENTS.—Child labor problem, by John Coleman Adams, p. 3; Actual present physical state of working children in Connecticut, by Julia Corcoran, p. 4-5; Future results of child labor, by Florence Kelley, p. 5-8; The critical character of the age period from fourteen to sixteen, by Oliver C. Smith, p. 8-13; The effect of premature toll upon wages and standards of labor, by Owen R. Lovejoy, p. 13-16; State industrial supervision of children in Germany and in Connecticut, by E. W. Lord, p. 16-18; Legislation advocated by the National child labor committee, by Owen R. Lovejoy, p. 18-21; Legislation proposed by the labor unions, by Edward M. Roszelle, p. 21-23. Enforcement of factory laws in Connecticut, by Giles Porter, p. 23; Proper minimum age for working children, by John Mitchell, p. 26-32.
- 103 **Child labor in New Jersey.** American academy of political and social science, Annals, Jan. 1904, v. 23: 183-184. H1.A4,v.23
- 104 **Child labor in the District of Columbia.** Charities, Dec. 2, 1905, v. 15: 270-271. HV1.C4,v.15
- 105 **Child labor in the District of Columbia.** Survey, Aug. 7, 1909, v. 22: 612. HV1.C4,v.22
- 106 **Child labor in the South.** Survey, July 12, 1913, v. 30: 493-494. HV1.C4,v.30
- 107 **Child labor in the United States and Massachusetts.** Massachusetts. Bureau of statistics of labor. Bulletin, July, 1904, no. 32: 161-167. HC107.M4A3,no.32
- 108 **Child slavery in America.** I. The child, the factory, and the state, by Alzina Parsons Stevens. II. Child labor an obstacle to industrial progress, by Alice L. Woodbridge. III. Data compiled and condensed from the original sources, by Thomas E. Will. IV. Bibliography of child labor, compiled by Thomas E. Will. Arena, June, 1894, v. 10: 117-144. AP2.A6,v.10
- 109 **Chute, Charles L.** Child labor in Pennsylvania. Survey, Jan. 25, 1913, v. 29: 541-542. HV1.C4,v.29
- 110 ——— The child labor problem in Pennsylvania. Child, Chicago, Oct. 1912, v. 1: 9-12. HQ750.A2C3, v.1
- 111 **Clark, Davis Waagatt.** American child and Moloch of to-day; child labor primer. Cincinnati, Jennings and Graham; New York, Eaton and Mains [c1907] 81, [1] p. front., ports. 19^{1/2}cm. HD6250.U3C5
 Bibliography: p. [73]-81.
- 112 **Cleland, Ethel.** Child labor: Indiana. American political science review, May, 1911, v. 5: 235-236. JA1.A6,v.5
- 113 **Clopper, Edward N.** Child labor and compulsory education in rural Ken-tucky. National child labor committee. New York, 1909. Pamphlet no. 120. 15 p. HD6250.U3N2,no.120
- 114 ——— Child labor in Indiana. [New York? 1909?] 16 p. illus. 23^{cm}. National child labor committee. Pamphlet no. 91. HD6250.U3N2,no.91

- 115 **Clopper, Edward N.** Child labor in the Ohio Valley states. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 79-85. H1.A4,v.33
National child labor committee. Pamphlet no. 97. 7 p. HD6250.U3N2,no.97
- 116 ——— Child labor in the smaller towns of Missouri. National child labor committee. New York, 1910. Pamphlet no. 144. 8 p. HD6250.U3N2,no.144
- 117 ——— Child labor in West Virginia. National child labor committee. New York, 1908. Pamphlet no. 86. 24 p. HD6250.U3N2,no.86
- 118 ——— Child labor in West Virginia in 1910. National child labor committee. New York, 1910. Pamphlet no. 142. 12 p. HD6250.U3N2,no.142
- 119 ——— The forward movement in Missouri, West Virginia, and Indiana. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 149-153. H1.A4,v.38
- 120 ——— The majesty of the law in Mississippi. Child labor bulletin, Feb. 1914, v. 2, no. 4: 54-58. HD6250.U3N4,v.2
- 121 ——— Provided however, or a bill of exceptions. National child labor committee. New York, 1914. Pamphlet no. 217. 11 p. HD6250.U3N2,no.217
- 122 **Colorado. Bureau of labor statistics.** Biennial report. Denver, 1888-1915. HC107.C7A2
CONTENTS RELATING TO CHILD LABOR:
1891-1892: The evils of child labor: p. 139-148; Education of children: p. 149-153.
1901-1902: Child labor: p. 280-292.
1902-1904: The women and children's eight-hour law: p. 39-41.
1909-1910: Woman and child labor in Colorado: Our women and children labor laws p. 248-252.
1913-1914: Child labor: p. 60.
- 123 **Commons, John B. and Helen L. Sumner.** Labor movement, 1820-1840. Cleveland, The Arthur H. Clark co., 1910. 392 p. 24½^{cm}. (A Documentary history of American industrial society, v. 5) HC103.D63,v.5
Child labor: a. Children in the factories of Massachusetts, 1825; b. Children in Philadelphia factories, 1830; c. Child labor at Paterson, N. J., 1835: p. 57-66.
- 124 **Commons, John Rogers, ed.** Trade unionism and labor problems; ed., with an introduction. Boston, New York [etc.] Ginn & company [1905] 2 p. l., iii-xiv, 628 p. 21½^{cm}. (Selections and documents in economics, ed. by William Z. Ripley) HD6483.C7
Child labor: p. 242, 345, 423, 501, 506.
- 125 **Connecticut. Bureau of labor statistics.** Annual report. Hartford [etc.] 1874-1914. HC107.C8A2
CONTENTS RELATING TO CHILD LABOR:
5th report, 1889: Child labor by Florence Kelley: p. 43-55.
8th report, 1892: Child labor: p. 175-216. Makes a comparison of census figures of 1880 and 1890 in textile industries, as to Connecticut, New England, and United States, showing relative increase or decrease in women and children employed.
10th report, 1894: Child labor: p. 265-291. Outlines an argument to raise age limit of children from 13 to 14 years.
18th report, 1902: The appendix: Laws relating to labor and labor interests, contains the laws regulating the employment of children.
24th report, 1909-10: Child labor. Published by permission of American association for labor legislation. Summary of "Child labor" laws by Laura Scott . . . dealing with fifty sovereign states . . . : p. 107-200.
- 126 ——— Report of the Bureau of labor on the conditions of wage-earning women and girls. Under authority of chapter 233, G. S. of 1913. Charlotte Molyneux Holloway, industrial investigator. Hartford, Published by the state, 1914. 139 p. 23^{cm}. HD6093.C8 1914

- 127 **Connecticut. Commission to investigate conditions of wage-earning women and minors.** Report presented to the General assembly of 1913. Hartford, Published by the state, 1913. 297 p. incl. tables. 23^{cm}.
HD6093.C8 1913a
Appendices: A. Report on the conditions . . . in the cotton, silk, corset, metal, and rubber industries in Connecticut.—B. Report on the conditions of women in alteration rooms of cloak and suit departments of department stores.—C. General tables.
Another issue of the same year (80 p.) contains the report of the Commission and a part of Appendix A.
- 128 **Coon, Charles L.** The dinner tater. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 85-89. H1.A4,v.38
- 129 **Coulter, Ernest Kent.** The children in the shadow; with an introduction by Jacob A. Riis. New York, McBride, Nast & company, 1913. xvii p., 3 l., 277 p. incl. front. plates. 19^{cm}. HV9106.N6C7
The child of bondage: p. 177-198.
- 130 **Daniels, Harriet McDoual.** The girl and her chance; a study of conditions surrounding the young girl between fourteen and eighteen years of age in New York city, prepared for the Association of neighborhood workers of New York city. New York, Chicago [etc.] Fleming H. Revell company [1914] 95 p. incl. tables, diagrs. 19^{cm}. HQ798.D3
The industrial situation: p. 44-66.
- 131 **Davies, Edgar T.** The present situation in Illinois. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 153-161. H1.A4,v.33
- 132 **Davis, Philip.** Child labor and vagrancy. Chautauquan, May, 1908, v. 50: 416-424. AP2.C48,v.50
- 133 **Dawley, Thomas Robinson.** The child that toileth not; the story of a government investigation. New York, Gracia publishing co. [1912] 490 p. 21^{1/2}^{cm}. HD6250.U3D3
- 134 **Dawson, Lucile F.** Shall our children work? Square deal, Dec. 1914, v. 15: 433-438. HD6500.S7,v.15
- 135 **Dealey, James Quayle.** The child welfare movement in the United States. Child, Aug. 1913, v. 3: 1043-1048. HQ750.A2C4,v.3
- 135a **Dean, Arthur D.** Child-labor or work for children. Craftsman, Mar. 1914, v. 25: 515-521. N1.C85,v.25
- 136 **De Lacy, William Henry.** Treatment of criminals by probation, etc. Message from the President of the United States, transmitting a communication setting forth some reasons why the more modern treatment of criminals by probation should be adopted into the federal procedure [and urging the early passage of an anti-child-labor law for the District of Columbia and the territories. Washington, Govt. print. off., 1906] 5 p. 23^{cm}. ([U. S.] 59th Cong., 2d sess. Senate. Doc. 12) HV9104.D3
- 137 **Delaware. General assembly. Senate.** Report of the Commission on child labor to the General assembly, 1913. (In Delaware. General Assembly. Senate. Journal. 1913. p. 79-87) J87.D3 1913b
- 138 **Delaware and child labor.** Outlook, Apr. 14, 1915, v. 109: 849. AP2.O8,v.109
- 139 **De Leon, Edwin W.** Accidents to working children. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 131-143. H1.A4,v.33

- 140 **Devine, Edward T.** The new view of the child. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 4-10.
H1.A4,v.32
National child labor committee. Pamphlet no. 71. 7 p.
HD6250.U3N2,no.71
- 141 **Doherty, J. B.** Child labor. (*In* Virginia. Child welfare conference, Richmond, Va., May 22-25, 1911. Addresses and discussions. Richmond, 1911. 23½^{cm}. p. 76-78. Bound with Virginia. State board of charities and corrections. Third annual report, 1911)
HV86.V8 1911
- 142 **Draper, Andrew S.** Conserving childhood. New York city, National child labor committee, 1909? 14 p. 23^{cm}. (National child labor committee. Pamphlet no. 100)
HD6250.U3N2,no.100
- 143 **Durland, Kellogg.** Child labor in Pennsylvania. Outlook, May 9, 1903, v. 74: 124-127.
AP2.O8,v.74
- 144 **Eastman, Crystal.** Work-accidents and the law. New York, Charities publication committee, 1910. xvi, 345 p. 24^{cm}. (The Pittsburgh survey; findings in six volumes, ed. by P. U. Kellogg)
HD6085.P6P6
Work accidents to children: p. 45, 79-89, 89, 87-89, 87, 102-103.
- 145 **Eldman, Benjamin W.** Child labor in New York city. Van Norden magazine, Apr. 1908, v. 3: 73-88.
HG1.V3,v.3
- 146 **Employers campaigning against child labor.** Survey, May 8, 1915, v. 34: 129-130.
HV1.C4,v.34
- 147 **Engel, Sigmund.** The elements of child protection, by Sigmund Engel . . . tr. from the German by Dr. Eden Paul. New York, The Macmillan co., 1912. xi, [1] 276 p. 22^{cm}.
Women's labour and child labour: p. 155-177.
- 148 **Eschenbrenner, Josephine J.** What is a child worth? [New York, National child labor committee, 1914] 6 p. 23^{cm}. (National child labor committee. Pamphlet no. 236)
Reprinted from the Child labor bulletin, v. 3, no. 1, May, 1914.
HD6250.U3N4,v.3
- 149 **Field, Arthur Sargent.** The child labor policy of New Jersey. Cambridge, Mass., American economic association; [etc., etc., '1909] vi, 229 p. 25^{cm}. (American economic association quarterly. Third ser., vol. xi, no. 3)
HB1.A5,3d ser.,vol.II,no.3
HD6250.U4N55
Health, p. 43-44, 49-52, 117, 121, 196, 215. Education, p. 52-55, 157-167, 188, 197.
- 150 **Fish, Frederick P.** The discipline of work. (*In* Child conference for research and welfare. Proceedings . . . 1910. New York city, 1910. 23½^{cm}. v. 2: 142-152.)
HQ750.A3C5,v.2
- 151 **Folks, Homer.** Poverty and parental dependence as an obstacle to child labor reform. American academy of political and social science, Annals, Jan. 1907, v. 29: 1-8.
H1.A4,v.29
National child labor committee. Pamphlet no. 41. 8 p.
HD6250.U3N2,no.41
- 152 **Forbush, William Byron.** The coming generation. New York and London, D. Appleton and company, 1912. xix, 402 p. fold. tab. 19½^{cm}. (The social betterment series, ed. by S. Matthews)
HQ755.F7
- 153 **Fox, Hugh F.** Child labor in New Jersey. American academy of political and social science, Annals, July, 1902, v. 20: 189-200.
H1.A4,v.20

- 154 **Frauen- und Kinderarbeit** in den Vereinigten Staaten. Germany. Statistisches Amt. Abteilung für Arbeiterstatistik. Reichs-Arbeitsblatt, Aug., Dec. 1912, v. 10: 596-601; 930-939. HD8441.A3,v.10
- 155 **Frey, John P.** Social cost of child labor. Child labor bulletin, v. 1, no. 1, June, 1912: 113-120. HD6250.U3N4,v.1
- 156 **Furman, Paul N.** A school-master governor and the working children. Survey, Mar. 13, 1915, v. 33: 646-647. HV1.C4,v.33
- 157 **Gibb, Spencer J.** The irregular employment of boys. Commonwealth, June-Aug. 1906, v. 10: 173-174; 208-209; 235-236. HN381.C7,v.10
- 158 **Gompers, Samuel.** The A. F. of L.'s successful fight for child labor laws. American federationist, Mar., Sept. 1912, v. 19: 209-214; 707-711. HD8055.A5A2,v.19
- 159 ——— Child labor. American federationist, Mar. 1911, v. 18: 216-217. HD8055.A5A2,v.18
- 160 ——— Child labor in the South. American federationist, July, 1901, v. 8: 262-263. HD8055.A5A2,v.8
- 161 ——— Children or parsimony—which shall prevail? American federationist, Apr. 1914, v. 21: 313-315. HD8055.A5A2
Appropriation for Children's bureau.
- 162 ——— Making child labor laws effective. American federationist, Apr. 1910, v. 17: 331-332. HD8055.A5A2,v.17
- 163 ——— Organized labor's attitude toward child labor. American academy of political and social science, Annals, Mar. 1906, v. 27: 337-341. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 79-83; Pamphlet no. 31. 5 p. HD6250.U3N2,no.20;no.31
- 164 ——— Subterfuge and greed in North Carolina [Editorial] American federationist, May, 1901, v. 8: 163-164. HD8055.A5A2,v.8
- 165 **Gordon, Jean M.** The forward step in Louisiana. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 162-165. H1.A4,v.33
National child labor committee. Pamphlet no. 103. 4 p. HD6250.U3N2,no.103
- 166 ——— Why the children are in the factory. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 67-71. H1.A4,v.32
National child labor committee. Pamphlet no. 76. 5 p. HD6250.U3N2,no.76
Same. (In National conference of charities and correction. Proceedings, 1908. Fort Wayne, Ind., 1908. 23¹/₂cm. p. 346-351). HV88.A3 1908
- 167 **Granger, Mrs. A. O.** The work of the General federation of women's clubs against child labor. American academy of political and social science, Annals, May, 1906, v. 25: 516-521. H1.A4,v.25
- 168 **Guild, Curtis.** Address: The eight-hour day for children under sixteen, Boston, December 4, 1913. Boston, Mass., Anchor linotype printing co. [1913] 8 p. 23¹/₂cm. HD6250.U4M48 1913
Published by the Massachusetts child labor committee.
- 169 **Gunton, George.** Child labor in the South. Gunton's magazine, Mar., Apr. 1901, v. 20: 253-254; 354-355. H1.G9,v.20
- 170 **Hale, Edward Everett.** Child slavery reform: a mother's fight. Woman's home companion, Oct. 1906, v. 33: 11, 20. AP2.W714,v.33

- 171 **Hall, George A.** Unrestricted forms of child labor in New York state. (*In* New York state conference of charities and correction. Proceedings, 1911. Albany, 1911. p. 91-103) HV88.N7 1911
National child labor committee. Pamphlet no. 168. 14 p.
HD6250.U3N2,no.168
- 172 **Harvey, George.** Save the children and the nation. North American review, Dec. 7, 1906, v. 183: 1209-1211. AP2.N7,v.183
Harper's bazar, Feb. 1907, v. 41: 197-198. TT500.H3,v.41
- 173 **Haworth, Paul Leland.** America in ferment. Indianapolis, The Bobbs-Merrill company [1915] 5 p. l., 477 p. 194^{cm}. (Problems of the nations) HN64.H37
Social justice for workers: Child labor: p. 192-200.
- 174 **Henderson, Charles Hanford.** Pay-day. Boston and New York, Houghton Mifflin company, 1911. vi, 338, [2] p. 20^{cm}. HN64.H43
An appeal for a radical readjustment of the relations of men educationally and industrially. The case of the children: p. 61-70.
- 175 **Henderson, Charles R.** Duty of a rich nation to take care of her children. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 20-22. H1.A4,v.33
National child labor committee. Pamphlet no. 111. p. 6-8.
HD6250.U3N2,no.111
- 176 ——— Protective legislation. American journal of sociology, Sept. 1908, v. 14: 207-210. HM1.A7,v.14
- 177 **Hine, Lewis W.** Present conditions in the South. Child labor bulletin, Feb. 1914, v. 2, no. 4: 59-69. HD6250.U3N4,v.2
- 178 ——— "Unto the least of these": photographs and descriptions. With foreword by Charles Edward Russell. Everybody's magazine, July, 1909, v. 21: 75-87. AP2.E9,v.21
- 179 **Hirsch, Emil G.** Child labor from the employer's point of view. American academy of political and social science. Annals, May, 1905, v. 25: 551-557. H1.A4,v.25
National child labor committee. Pamphlet no. 2, p. 139-145; Pamphlet no. 4, 2d ed. 1907. 7 p.
HD6250.U3N2,no.2,4
- 180 **Holmes, John Haynes.** Indifference of the church to child labor reform. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 23-32. H1.A4,v.35
- 181 **Horton, Isabelle.** Children's work. (*In her* The burden of the city. New York [etc.], 1904. 20^{cm}. p. 149-193) HV530.H8
- 182 **Hourwich, Isaac Aaronovich.** Immigration and labor; the economic aspects of European immigration to the United States. New York and London, G. P. Putnam's sons, 1912. xvii, 544 p. illus., diagrs. 224^{cm}. HD8081.A5H6
Child labor and immigration: p. 26, 107, 318-324.
- 183 **Hubbard, Elbert.** White slavery in the South. Philistine, May, 1902, v. 14: 161-178. AP2.P54,v.14
American federationist, Apr. 1905, v. 12: 205-209. Same article, Slaughter of the innocents. HD8055.A5A2,v.12
- 184 **Hunter, Robert.** Child labor: A social waste. Independent, Feb. 12, 1903, v. 55: 375-379. AP2.I53,v.55
- 185 ——— Poverty. New York, London, The Macmillan company, 1904. xi, 382 p. plan. 204^{cm}. HV31.H9
The child. p. 190-200. Appendix E: p. 351-358.

- 186 **Illinois. Bureau of labor statistics.** Biennial report. 17th. Child labor. Springfield, Ill., 1915. 131 p. tables. 22 $\frac{1}{2}$ cm. HC107.I3A2
 "The investigation was made principally to ascertain the number of employers favorable to a sixteen-year minimum age; the extent of education; the apparent physical and mental condition of the children; their cause for working and the income of the children and their families."
- 187 ——— **Office of inspectors of factories and workshops.** Annual report. 20th-21st, 1912-1914. Springfield, Ill., 1914. 2 v. in 1. 22cm. HD3663.I3A2
 1912-1913: Child labor: p. 11-29. 1913-1914: Child labor: p. 11-32, 56-73.
- 188 **An Illustrated handbook** of the industrial exhibit held under the auspices of the Pennsylvania child-labor committee, the Consumers' league of Philadelphia, the New Century club, the Civic club; Horticultural hall, Philadelphia, Dec. 8-15, 1906. [Philadelphia, pub. by the executive committee of the Industrial exhibit, 1906] 78 p. 21cm.
- 189 **Iseman, Myre St. Wald.** Race suicide. New York, The Cosmopolitan press, 1912. 216 p. 19cm. HQ766.I7
 Contains information concerning condition and statistics of child labor in the United States.
- 190 **Jones, Herschel H.** Child labor in Alabama, photographs by Lewis W. Hine. Birmingham, January, 1915. [Birmingham, Alabama child labor committee, 1915] 1 p. l., 8, [1] p. illus. 23cm. HD6250.U4A3 1915
- 191 **Jones, Jerome.** Child labor and low wages. Child labor bulletin, May, 1913, v. 2, no. 1: 52-55. HD6250.U3N4,v.2
- 192 **Kandel, I. L.** Juvenile employment. U. S. Bureau of education. Bulletin, 1913, v. 57: 151-158. L111.A6,v.57
- 193 **Kelley, Mrs. Florence.** The child breadwinner and the dependent parent. Child labor bulletin, May, 1913, v. 2, no. 1: 1-6. HD6250.U3N4,v.2
- 194 ——— Child labor in the Carolinas. Charities and the Commons, Jan. 30, 1909, v. 21: 742. HV1.C4,v.21
- 195 ——— Factory inspection in Pittsburgh, with special reference to the conditions of working women and children. (*In* Wage-earning Pittsburgh. New York, 1914, p. 189-216.) HD8085.P6P6
- 196 ——— Judge-made ignorance in Pennsylvania. Charities and the Commons, May 5, 1906, v. 16: 189-190. HV1.C4,v.16
- 197 ——— Minimum-wage boards. American journal of sociology, Nov. 1911, v. 17: 303-314. HM1.A7,v.17
- 198 ——— Modern industry in relation to the family, health, education, morality. New York [etc.] Longmans, Green, and co., 1914. 147 p. 19 $\frac{1}{2}$ cm. HD2326.K4
 Child labor: See Index, p. 142.
- 199 ——— The moral dangers of premature employment. (*In* National conference of charities and correction. Proceedings, 1906. [Columbus, 1906] 23cm. p. 157-164) HV88.A3 1906
- 200 ——— The responsibility of the consumer. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 108-112. H1.A4,v.32
 National child labor committee. Pamphlet no. 81. 5 p. HD6250.U3N2,no.81
- 201 ——— Standards of life and labor: the standard minimum age for beginning to work for wages. Twentieth century magazine, Nov., Dec. 1911, Feb. 1912, v. 5: 30-34, 104-107, 370-373. AP2.T88,v.5

- 202 **Kelley, Mrs. Florence, and Abina P. Stevens.** Wage-earning children. (*In* Hull house maps and papers. New York, 1895. 22^{cm}. Library of economics and politics, no. 5. p. 49-76.) HV4196.C4H9
- 203 **The Kentucky child labor association.** Survey, Dec. 25, 1909, v. 23:412. HV1.C4,v.23
- 204 **Key, Ellen Karolina Sofia.** The century of the child. New York & London, G. P. Putnam's sons [1912] 339 p. 20^{cm}. HQ755.K5 1912
Child labour and the crimes of children: p. 316-339.
- 205 **Kinderarbeit in den Vereinigten Staaten.** Soziale Praxis, Jan. 6, 1910, v. 19: 346-348. H5.S7,v.19
- 206 **Kinderarbeit in den Vereinigten Staaten.** Germany. Statistisches Amt. Abteilung für Arbeiterstatistik. Reichs-Arbeitsblatt, May, 1912, v. 10: 353-357. HD8441.A3,v.10
- 207 **Kingsbury, John A.** Child labor and poverty: both cause and effect. Child labor bulletin, May, 1913, v. 2, no. 1: 27-34. HD6250.U3N4,v.2
- 208 **Kirkland, James H.** Ethical and religious aspects of child labor. American academy of political and social science, Annals, Supplement, July, 1906, v. 32:92-96. H1.A4,v.32
National child labor committee, Pamphlet no. 78. 5 p. HD6250.U3N2,no.78
- 209 **Ladoff, Isador.** American pauperism and the abolition of poverty. Chicago, C. H. Kerr & company, 1904. 230 p. 17½^{cm}. (Standard socialist series) HV91.L15
The children of poverty, p. 50-92. Pennsylvania child labor, p. 93-102.
- 210 **Leonard, Robert J.** Some facts concerning the people, industries, and schools of Hammond and a suggested program for elementary industrial, prevocational, and vocational education. Hammond, Ind., 1915. v-viii, 165 p. diagrs. 23^{cm}. LA235.H3L3
Work of young people under 17 years of age: p. 36-55.
- 211 **Leupp, Constance.** A substitute for charity. Pearson's magazine, Jan. 1915, v. 33:103-113. AP2.P35,v.33
- 212 **Levasseur, Émile.** The American workman. An American translation by Thomas S. Adams ... ed. by Theodore Marburg. Baltimore, The Johns Hopkins press, 1900. xx, 517 p. 23½^{cm}. [Johns Hopkins university studies in historical and political science. Extra volume] HD8072.L382
Child labor: p. 105, 106, 121, 134, 137, 145-152, 153-170, 176, 482. Wages of women and children: p. 336-358.
- 213 **Ley, Frank T.** The child labor problem in Michigan: address at Ann Arbor, Mich. Feb. 21, 1905. (*In* Michigan. Bureau of labor. Twenty-third annual report. Lansing, 1906. 23½^{cm}. p. 319-324.) HC107.M5A2 1906
- 214 **Lindsay, Samuel McCune.** Child labor: a national disgrace. American academy of political and social science, Annals, Sept. 1906, v. 28: 301-303. H1.A4,v.28
Overland monthly, Sept. 1906, v. 48: 166-170. AP2.O9,v.48
Federation bulletin, Oct. 1906, v. 4:5-6. HQ1871.F3,v.4
- 215 ——— Child labor a national problem. American academy of political and social science, Annals, Mar. 1906, v. 27: 331-336. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 73-78; Pamphlet no. 30. 6 p. HD6250.U3N2,no.20;30
- 216 ——— Child labor in the United States. American economic association. Publications, Feb. 1907, 3d ser. v. 8: 256-259. HB1.A5,3d ser.,v.8
Discussion: Gilman, Charlotte Perkins. p. 260-262; McLean, Francis H. p. 262-267.

- 217 **Lindsey, Samuel McCune.** Child labor. Report of the [National child labor] committee. (*In* National conference of charities and correction. Proceedings, 1906. [Columbus, 1906] 23^{cm}. p. 150-157.) HV88.A3 1906
Discussion on child labor, p. 520-525.
- 218 ——— Exploring the new world for children. National child labor committee. New York, 1909. Pamphlet no. 118. [4] p. HD6250.U3N2,no.118
Same. (*In* Child conference for research and welfare, Proceedings, 1909, New York, [1910] 24^{cm}. p. 139-143.) HQ750.A3C5,v.1
- 219 **Lindsey, Ben B.** Juvenile delinquency and employment. Survey, Nov. 4, 1911, v. 27: 1097-1100. HV1.C4,v.27
- 220 ——— and **George Creel.** Children in bondage. Good housekeeping, July, 1913, v. 57: 14-22. TX1.G7,v.57
- 221 ——— The cost of child labor. Good housekeeping, Oct. 1913, v. 57: 505-512. TX.G7,v.57
- 222 ——— The great American cancer: Child labor is an evil; it is eating at the life of the nation. Good housekeeping, Dec. 1913, v. 57: 775-781. TX1.G7,v.57
- 223 ——— Why do children toil? Good housekeeping, Aug. 1913, v. 57: 168-177. TX1.G7,v.57
- 224 **London, Jack.** The apostate; a parable of child labor. Girard, Kan., The Appeal to reason, 1906. cover-title, 15 [1] p. 19^{cm}. HD6250.U3L7
- 225 **Lord, Everett W.** Child labor in New England. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 31-39. H1.A4,v.32
National child labor committee. Pamphlet no. 74. 9 p. HD6250.U3N2,no.74
- 226 **Louisiana. Bureau of statistics of labor.** Report. Baton Rouge, 1902-1905. 3 v. fold. tables. 23^{cm}. HC107.L8A2
1900-01: Employment of children: p. 83-85; Children as gymnasts: p. 92.
1904-05: Child labor: p. 13-50; Child labor in the United States and its great attendant evils, by Felix Adler: p. 16-26; Child labor legislation in the South, by Neal L. Anderson: p. 26-40; What constitute effective child labor laws, by Florence Kelley: p. 40-46.
- 227 **Lovejoy, Owen B.** Aims and achievements of the National child labor committee. (*In* Child conference for research and welfare. Proceedings. 1910. New York city, 1910. 234^{cm}. v. 2: 160-171) HQ750.A3C5,v.2
- 228 ——— The child in industry. (*In* National education association. Journal of proceedings and addresses, 1909. Winona, 1909. 24^{cm}. p. 726-733) L13.N4 1909
National child labor committee, New York. 1909. Pamphlet no. 119. 8 p. HD6250.U3N2,no.119
- 229 ——— Child labor. Philadelphia, Boston [etc.] American Baptist publication society [1912] 30 p. 20^{cm}. (Social service series) HD6250.U3L8
Published for the Social service commission of the Northern Baptist convention.
- 230 ——— Child labor and family disintegration. Independent, Sept. 27, 1906, v. 61: 748-750. AP2.I53,v.61
National child labor committee. Pamphlet no. 58. 4 p. HD6250.U3N2,no.58
- 231 ——— Child labor and philanthropy. (*In* National conference of charities and correction. Proceedings. Minneapolis, 1907. p. 196-209) HV88.A3 1907
National child labor committee. Pamphlet no. 62. 12 p. HD6250.U3N2,no.62
- 232 ——— Child labor and the church. Methodist review, Oct. 1914, v. 63: 743-748.

- 233 **Lovejoy, Owen B.** Child labor campaign. Academy of political science. Proceedings, July, 1912, v. 4: 80-85. H31.A4,v.4
- 234 ——— Child labor in the United States. (*In* International congress of hygiene and demography. Transactions, 15th, 1912, v. 3: 1001-1010) RA422.I6 1912,v.3
- 235 ——— The economic folly of child labor. Economic world, July 31, 1915, v. 96: 142-143. HG8011.M3,v.96
- 236 ——— Eight hours for children [Massachusetts]. Survey, Oct. 11, 1913, v. 31: 58-59. HV1.C4,v.31
- 237 ——— The national child labor movement. (*In* National conference of charities and correction. Proceedings, 1910. Ft. Wayne, 1910. 234^{cm}. p. 232-235) HV88.A3 1910
- 238 ——— Needs of the anti-child labor movement. (*In* National conference of charities and correction. Proceedings, 1908. Fort Wayne, Ind., 1908. 234^{cm}. p. 363-364) HV88.A3 1908
- 239 ——— Next steps in the child labor campaign. Academy of political science. Proceedings, July, 1912, v. 2: 80-85. H31.A4,v.2
- 240 ——— Seven years of child labor reform. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 31-38. H1.A4,v.38
National child labor committee. Pamphlet no. 161. 8 p. HD6250.U3N2,no.161
- 241 ——— A six years' battle for the working child. American review of reviews, Nov. 1910, v. 42: 593-596. AP2.R4,v.42
National child labor committee, New York. Leaflet no. 35. Dec. 1910. 15 p. 16^{cm}. HD6250.U3N18,no.35
- 242 ——— Social standards for industry. (*In* National conference of charities and correction. Proceedings, 1912. Fort Wayne, Ind., 1912. 234^{cm}. p. 388-394) HV88.A3 1912
Child labor bulletin, Nov. 1912, v. 1, no. 3: 21-25. HD6250.U3N4,v.1
- 243 ——— Some unsettled questions about child labor. Charities and the Commons, Jan. 16, 1909, v. 21: 673-675. HV1.C4,v.21
American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 49-62. H1.A4,v.33
National child labor committee. Pamphlet no. 108. 14 p. HD6250.U3N2,no.108
- 244 ——— Standards of living and labor. (*In* National conference of charities and correction. Proceedings, 1912. Fort Wayne, Ind., 1912. 23^{cm}. p. 376-436) HV88.A3 1912
- 245 **Luther, Seth.** An address to the working-men of New-England on the state of education and on the condition of the producing classes in Europe and America. With particular reference to the effect of manufacturing (as now conducted) on the health and happiness of the poor, and on the safety of our republic. Delivered in Boston, Charlestown, Mass., Portland, Saco, Me., and Dover, N. H. By Seth Luther. Boston, The author, 1832. 39 p. 224^{cm}.
Miscellaneous pamphlets, v. 1161, no. 2. AC901.M5,v.1161
His pamphlet is valuable . . . cases of cruelty to children are described in detail . . . the amount of child labor . . . must have been relatively almost as great as at present. The labor movement in America. By Richard T. Ely. New York, 1906, p. 48-49.
- 246 **Macarthur, W., and others.** The industrial crime, child labor. A symposium. American federationist, May, 1903, v. 10: 339-360. HD8055.A5A2,v.10

- 247 **McCleary, G. F.** The state as over-parent. Albany review, Oct. 1907, v. 2: 46-59. AP4.A343,v.2
- 248 **McCullough, J. A.** Conditions of child employing industries in the South: South Carolina. Child labor bulletin, May, 1913, v. 2, no. 1: 133-138. HD6250.U3N4,v.2
- 249 **McEnnis, John T.** The white slaves of free America: being an account of the sufferings, privations, and hardships of the weary toilers in our great cities as recently exposed by Nell Nelson, of the Chicago times. Female labor, child labor, contract and prison labor. By John T. McEnnis. Chicago, R. S. Peale & company, 1888. ix, 128 p. incl. illus. 23^{cm}. HD8072.M2
- 250 **Macfadyen, Irene M. Ashby.** Abolish child labor. American federationist, Jan. 1902, v. 9: 19-20. HD8055.A5A2,v.9
- 251 ——— Child life vs. dividends. American federationist, May, 1902, v. 9: 215-223. HD8055.A5A2,v.9
In part in Current literature, July, 1902, v. 33: 77-79. AP2.C95,v.33
- 252 ——— The fight against child labor in Alabama. American federationist, May, 1901, v. 8: 150-157. HD8055.A5A2,v.8
- 253 ——— Report to the Executive committee of the state, on the history of child labor legislation in Alabama. By Irene M. Ashby. Montgomery, Ala., 1901. cover-title, 35 p. 21x10^{cm}. (Child labor in Alabama. Document no. 1) HD6250.U4A3
- 254 **McKelway, A. J.** The awakening of the South against child labor. American academy of political and social science, Annals, Jan. 1907, v. 29: 9-18. H1.A4,v.29
National child labor committee. Pamphlet no. 42. 10 p. HD6250.U3N2,no.42
- 255 ——— The child against the man. Child labor bulletin, Nov. 1913, v. 2, no.3: 52-59. HD6250.U3N4,v.2
Answer to George F. Stratton. The man behind the child.
- 256 ——— Child labor and citizenship. (In National conference of charities and correction. Proceedings, 1908. Fort Wayne, Ind., 1908. 234^{cm}. p. 351-363) HV88.A3 1908
- 257 ——— Child labor and its attendant evils. Sewanee review, Apr. 1908, v. 16: 214-227. AP2.S5,v.16
National child labor committee. Pamphlet no. 68. 16 p. HD6250.U3N2,no.68
- 258 ——— Child labor and poverty. Survey, Apr. 12, 1913, v. 30: 60-62. HV1.C4,v.30
- 259 ——— Child labor and social progress. Charities and the Commons, Apr. 18, 1908, v. 20: 104-107. HV1.C4,v.20
- 260 ——— Child labor and the home. (In National conference of charities and correction. Proceedings, Memphis, Tenn., 1914. Fort Wayne, Ind., 1914. 23^{cm}. p. 333-339) HV88.A3 1914
- 261 ——— Child labor and the minimum wage. (In National conference of charities and correction. Proceedings, Seattle, 1913. Fort Wayne, Ind. 1913. 23^{cm}. p. 246-248) HV88.A3 1913
- 262 ——— Child labor campaign in the South. Survey, Oct. 21, 1911, v. 27: 1023-1028. HV1.C4,v.27
- 263 ——— Child labor: history and present status. Methodist review, July, 1907, v. 36: 468-481.

- 264 **McKelway, A. J.** Child labor in Georgia. National child labor committee, New York, 1910. Pamphlet no. 138. 20 p. HD6250.U3N2,no.138
- 265 — Child labor in Georgia. Child labor bulletin, Aug. 1913, v. 2, no. 2, p. 53-79. HD6250.U3N4,v.2
- 266 — Child labor in Mississippi. National child labor committee, New York, 1911. Pamphlet no. 169. 20 p. HD6250.U3N2,no.169
- 267 — Child labor in southern industry. American academy of political and social science, Annals, May, 1905, v. 25: 430-436. H1.A4,v.25
National child labor committee. Pamphlet no. 2, p. 20-24; Pamphlet no. 12, 7 p. HD6250.U3N2,no.2,no.12
- 268 — Child labor in Tennessee. National child labor committee. New York, 1911. Pamphlet no. 150. 16 p. HD6250.U3N2,no.150
- 269 — Child labor in the Carolinas; account of investigations made in the cotton mills of North and South Carolina, by Rev. A. E. Seddon, A. H. Ulm, and Lewis W. Hine, under the direction of the southern office of the National child labor committee. [New York? 1909] [20] p. illus. 23^{cm}. (Pamphlet[s] no. 92) HD6250.U3N2,no.92
- 270 — Child labor in the Carolinas. Charities and the Commons, Jan. 30, 1909, v. 21: 743-757. HV1.C4,v.21
- 271 — Child labor in the South. American academy of political and social science, Annals, Jan. 1910, v. 35: 156-164. H1.A4,v.35
- 272 — Child labor in the South. (In National conference of charities and correction. Proceedings. 1909. Fort Wayne, [1909]. 23^{cm}. p. 38-42) HV88.A3 1909
- 273 — Child labor in the South. Outlook, Apr. 27, 1907, v. 85: 999-1000. AP2.O8,v.85
- 274 — Child labor in Virginia. National child labor committee, New York, 1911. Pamphlet no. 171. 12 p. HD6250.U3N2,no.171
- 275 — The child labor problem—a study in degeneracy. American academy of political and social science, Annals, Mar. 1906, v. 27: 312-326. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 54-68. HD6250.U3N2,no.20;no.20a
- 276 — The extent of child labor in the South and needed legislation. (In Southern sociological congress. 2d, Atlanta, 1913. The South mobilizing for social service; addresses delivered at the Southern sociological congress . . . 1913. Nashville, 1913. 24^{cm}. p. 234-241.) HN79.A2S7 1913
- 277 — The fight for child labor reform in the Carolinas. Charities and the Commons, Mar. 20, 1909, v. 21: 1224-1226. HV1.C4,v.21
- 278 — The fight to save the children. World to-day, Apr. 1907, v. 12: 427-430. AP2.W75,v.12
- 279 — The Florida child labor campaign. Survey, July 12, 1913, v. 30: 497-498. HV1.C4,v.30
- 280 — How the fight for the children was won in Georgia. Woman's home companion, Oct. 1906, v. 33: 18-19. 21. AP2.W714,v.33
- 281 — The leadership of the child. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 19-30. H1.A4,v.32
National child labor committee. Pamphlet no. 73. 12 p. HD6250.U3N2,no.73

- 282 **McKelway, A. J.** New territory. American academy of political and social science, Annals, July, 1911, supplement, v. 38: 139-143. H1.A4,v.38
- 283 ——— Protecting negro child workers in Virginia. Survey, Aug. 15, 1914, v. 32: 496. HV1.C4,v.32
- 284 ——— Ten years of child labor reform. (In National conference of charities and correction. Proceedings, Memphis, Tenn., 1914. Fort Wayne, Ind., 1914. 23^{cm}. p. 138-146) HV88.A3 1914
- 285 ——— Ten years of child labor reform in the South. Child labor bulletin, Feb. 1914, v. 2, no. 4: 35-39. HD6250.U3N4,v.2
- 286 ——— Two corrections: twelve-year states. Survey, Mar. 9, 1912, v. 27: 1918. HV1.C4,v.27
- 287 **McLeod, Malcolm J.** The child labor question: address at Detroit, Aug. 22, 1905. (In Michigan. Bureau of labor. Twenty-third annual report. Lansing, 1906. 23^{1/2}^{cm}. p. 315-319) HC107.M5A2 1906
- 288 ——— Women wage earners and child labor in Michigan. (In Michigan. Bureau of labor. Twenty-fourth annual report, 1907. Lansing, 1907. 23^{1/2}^{cm}. p. 323-329) HC107.M5A2 1907
An address . . . before the State federation of women's clubs at Benton Harbor, Mich. Oct. 18, 1906.
- 289 **Magruder, Julia.** The child-labor problem: fact *versus* sentimentality. North American review, Oct. 1907, v. 186: 245-256. AP2.N7,v.186
- 290 **Maine. Bureau of industrial and labor statistics.** Annual report of the Bureau of industrial and labor statistics . . . 1st-24th, 1887-1910. Augusta, 1888-1910. 24 v. plates, maps, tables. 23^{cm}. HQ107.M2A3
21st, 1907: Women and children in sardine factories, by Eva L. Shorey: p. 121-137; Child labor [Portland] by Eva L. Shorey: p. 159-160; Report of the Inspector of factories: Child labor: p. 500-503.
22d, 1908: Child labor: p. xi-xiv; Industrial conditions surrounding women and children in the textile industry: p. 1-83. Early factory labor in New England: p. 63-81; Shorter workday for women and minors: p. 340-355.
23d, 1909: Statistics of children employed in various mills, with number of certificates filed: p. 465.
- 291 ——— **Dept. of labor and industry.** Biennial report. 1st-2d. 1911-1914. Waterville, Me., 1913-1915. 2 v. plates. 24^{cm}. HD8053.M2A3
Continuation of the "Annual report of the Bureau of industrial and labor statistics."
1st, 1911-12: Child labor, p. 13-18.
2d, 1913-14: Child labor, p. 160-183. (Includes results of investigation of the home conditions of all 14-year-old minors employed on June 10, 1913.)
- 292 **Mangold, George Benjamin.** Child problems. New York, The Macmillan company, 1910. xv, 381 p. 19^{cm}. (The citizen's library of economics, politics, and sociology, ed. by R. T. Ely) HQ769.M25
Child labor, p. 180-217; Street trades, p. 198-199, 222.
- 293 ——— Problems of child welfare. New York, The Macmillan company, 1914. xv, 522 p. 20^{1/2}^{cm}. (Social science text-books, ed. by R. T. Ely) HV713.M3
Child labor: p. 280-341.
- 294 **Markham, Edwin.** Children in bondage; a complete and careful presentation of the anxious problem of child labor—its causes, its crimes, and its cure, by Edwin Markham, Benjamin B. Lindsey, and George Creel, with an introduction by Owen R. Lovejoy. New York, Hearst's international library co., 1914. 411 p. front., plates. 21^{cm}. HD6250.U3M3
"A brief bibliography": p. 408-406.
- 295 **Marot, Helen.** Progress in Pennsylvania. Protection for children in mills and mines. Charities, June 10, 1905, v. 14: 834-836. HV1.C4,v.14

- 296 **Marx, David.** Some ancient standards of child protection. Child labor bulletin, May, 1913, v. 2, no. 1: 42-51. HD6250.U3N4,v.2
National child labor committee. Pamphlet no. 198. 11 p.
HD6250.U3N2,no.198
- 297 **Maryland. Bureau of industrial statistics.** Report. 1st-24th, 1893-1915. Baltimore, 1894-1916. 24 v. tables, maps. 23-23½cm. HC107.M3A15
- CONTENTS RELATING TO CHILD LABOR:**
1993: Child labor: p. 179-199. An investigation undertaken at the suggestion of the Knights of Labor in Baltimore as to the effects of child labor in that city; with letters on the subject from Cardinal Gibbons, Sidney Sherwood, and others.
1901: Employment of children: p. 175-178.
1906: The new child labor law: Results of the work for first five months: p. 11-45.
1907: Results of work in enforcing the child labor law: p. 13-70.
1908: Child labor law: p. 9-10, 193-244, 256.
1909: Child labor: p. 7-8, 13-67, 81.
1910: Child labor: p. 7-8, 11-32; Law against messenger service: p. 8, 14-15.
1911: Child labor: p. 7-8, 12-67.
1912: Child labor: p. 14-28; New child labor law: p. 29-46; Children on the stage: p. 46-47
1913: Child labor: Statistics and information: p. 7-75; Child labor inspection of the canning industry: p. 76-84; General child-labor inspection: p. 85-92; Newsboy regulations: p. 93-106; Children on the stage: p. 107-122.
1914: Special report on child labor: Issuance of employment certificates: p. 9-67; A study of the fifteen largest child employing industries, by Mildred Rankin: p. 68-99; Report of medical examiner for female applicants, by Anna S. Abercrombie: p. 100-107; Report of medical examiner for male applicants, by John C. Travers: p. 108-128; Issuance of employment certificates in the counties, by Marie L. Rose: p. 139-161; Child labor inspection: p. 162-190; Street traders: p. 191-197; Children on the stage: p. 198-214.
1915: Maryland child laborers: General summary and introduction, p. 1-14; Retrospect of three years' work under the present child labor law, p. 15-35; The bureau's stewardship during 1915, p. 36-39; The contribution of the children of Baltimore to the world's work of 1915, by Almee Guggenheimer, p. 40-75; Why children seek new jobs, p. 76-88; Report of medical examiners, p. 89-100; Newsboys and other street traders, by Lettie L. Johnston, p. 101-129; Children on the stage, p. 130-148; Control of child labor in western Maryland (Allegheny, Washington, and Frederick counties), by Marie L. Rose, p. 149-179; Issuance of employment certificates in the counties other than western Maryland, by Mathilde L. Selig, p. 180-191; The bureau inspection during 1915, by Anna Herkner, p. 192-201; Child labor inspection of the eastern shore of Maryland, by Mathilde L. Selig, p. 202-217.
- 298 **Massachusetts. Commission on minimum wage boards.** Report of the Commission on minimum wage boards. January, 1912. Boston, Wright & Potter printing co., state printers, 1912. 326 p. 23cm. ([General court] House [doc.] 1697.) HD4918.M4
Includes statistics on the employment of children.
- 299 ——— **Commission to investigate the inspection of factories, workshops, mercantile establishments, and other buildings.** Report, January, 1911. Boston, Wright & Potter printing co., state printers, 1911. 112 p. 23cm. HD3663.M4A5 1911
The appendix includes the inspection systems of Great Britain, Germany, New York, New Jersey, Pennsylvania, Ohio, Illinois, and Wisconsin.
The enforcement of child labor laws is one of the duties in all of the systems.
- 300 ——— **Constable of the commonwealth.** Report of the Hon. Henry K. Oliver, deputy state constable, especially appointed to enforce the laws regulating the employment of children in manufacturing and mechanical establishments. Boston, Wright & Potter, state printers, 1868. 95 p. 23cm. ([General court, 1868] Senate [doc.] no. 21) HD6250.U4M4
- 311 ——— **Factory children.** Report upon the schooling and hours of labor of children employed in the manufacturing and mechanical establishments of Massachusetts. By George E. McNeill, deputy state constable. Boston, Wright & Potter, state printers, 1875. 76 p. 23½cm. ([General court, 1875] Senate. [Doc.] no. 50) HD6250.U4M47 1875

- 302 **Massachusetts. General court. House of representatives.** Report of the special committee appointed . . . 1913 to investigate the conditions under which women and children labor in the various industries and occupations. January, 1914. Boston, Wright & Potter printing co., 1914. 194 p. 25^{cm}. (House. [Doc.] no. 2126)
 "Labor laws of other states relating to women and children": p. 107-194.
- 303 ——— **Minimum wage commission.** Annual report. Boston, 1914-15. 2 v. in 1. tables (part fold.) diagrs. 23^{cm}. HD4918.M5
 ——— Bulletin No. 1-11. Boston, 1914-16. HD4918.M55
- 304 **Massachusetts child labor committee.** Report . . . Jan. 1, 1912, 1914, 1915. [Boston, 1912-1915.] 3 v. 23^{cm}.
- 305 **Miller, Marion Mills, ed.** Great debates in American history, from the debates in the British Parliament on the colonial Stamp act (1764-1765) to the debates in Congress at the close of the Taft administration (1912-1913). [The national ed.] New York, Current literature publishing company [1913] 14 v. fronts., illus., plates, ports. 24^{cm}. E173.M64,v.11
 Child labor, v. 11, p. 288-320.
- 306 **Miller, Wallace E.** The child labor situation in Ohio and border states. American academy of political and social science, Annals, Jan. 1907, v. 29: 71-76. H1.A4,v.29
 National child labor committee. Pamphlet no. 49. 6 p. HD6250.U3N2,no.49
- 307 **Minnesota. Bureau of labor.** Biennial report. St. Paul [etc.] 1888-1915. fold. charts. 23^{cm}. HC107.M6A2
- CONTENTS RELATING TO CHILD LABOR:**
 1880-1890: The second chapter, p. 154-233, is devoted to child labor and presents from the "Report on the factory system of the United States," by Carroll D. Wright, a short review of English legislation, with a synopsis of the Factory act of 1898, as far as it applies to textile factories.
 1901-1902: Child labor: p. 406-419.
 1903-1904: Child labor: v. 1, p. 83-91. A general review of the conditions of employment of children in the various industries.
 1905-1906: Child labor in Minnesota: p. 269-342.
 1907-1908: Child labor: p. 11-23; Statistics: p. 235-237. The child woman: the girl away from home: p. 235-240.
 1909-1910: Child labor: p. 7-8, 58-123; Messenger service: p. 609-610; Compulsory education law: p. 611-613.
 1911-1912: Child labor: p. 310-317.
 1913-1914: Child labor legislation: p. 23-25; Report on women and children: p. 122-144.
- 308 ——— Child labor bulletin no. 2. March, 1908. St. Paul, 1908. 1 pam. 23^{cm}. HD6250.U4M63
- 309 ——— Special report of child-labor in Minnesota. 1905. Minneapolis, Press of Murphy-Travis co. [1905] cover-title, 8 p. 22^{1/2}cm. HD6250.U4M65 1905
- 310 **Missouri. Bureau of labor statistics and inspection.** Toilers of Missouri. Statistics covering organized labor. Jefferson City [1911]. 236 p. plates, ports. (partly fold.) 23^{cm}. HD6517.M8A4
 Child labor problem, p. 145-147.
- 311 ——— **Senate wage commission for women and children.** Report to the Senate of the 48th General assembly of Missouri. [Jefferson City?] 1915. 108 p. 23^{cm}. HD6061.M8
 Michael Kinney, chairman.
- 312 **Mitchell, John.** Organized labor, its problems, purposes, and ideals, and the present and future of American wage earners. Philadelphia, Pa., American book and Bible house [1903] xii, 436 p. front., plates, ports. 23^{1/2}cm. HD6508.M6
 The work of women and children: p. 131-141.

- 313 **Montgomery, Louise.** The American girl in the stockyards district. Chicago, Ill., The University of Chicago press [1913] vi, 70 p. illus. (plan) plates, diagrs. 24^{cm}. (A study of Chicago's stockyards community . . . An investigation carried on under the direction of the Board of the University of Chicago settlement and the Chicago alumnae club of the University of Chicago. II) HN80.C5B6
- 314 **Morgan, John H.** Essentials in factory inspection. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 101-107. H1.A4,v.32
National child labor committee. Pamphlet no. 80. 7 p.
HD6250.U3N2,no.80
- 315 **Mosby, Thomas Speed.** The problem of child idleness. North American review, July 5, 1907, v. 185: 515-517. AP2.N7,v.185
- 316 **Murdoch, Mrs. W. L.** Conditions of child employing industries in the South: Alabama. Child labor bulletin, May, 1913, v. 2, no. 1: 124-128. HD6250.U3N4,v.2
- 317 **Murphy, Edgar Gardner.** The child labor question in Alabama: a plea for immediate action. National child labor committee. New York, 1908. Pamphlet no. 59. 12 p. HD6250.U3N2,no.59
- 318 ——— Problems of the present South; a discussion of certain of the educational, industrial and political issues in the southern states. New York [etc.] Longmans, Green, and co., 1909. xi, 335 p. incl. tables. 20^{cm}. HC107.A13M8
The industrial revival and child labor: p. 95-125; Child labor and the industrial South: p. 127, 149, 309-329.
- 319 **Mussey, Mabel Hay B.** Holding the mirror up to industry: The Philadelphia exhibit. Charities and the Commons, Jan. 5, 1907, v. 17: 591-598. HV1.C4,v.17
- 320 **National child labor committee,** New York. [Child labor. Proceedings of the first annual meeting.] Philadelphia, American academy of political and social science, 1905. 1 p. l., 221 p. 26^{cm}. (The annals of the American academy of political and social science. vol. xxv, no. 3) H1.A4,v.25
CONTENTS.—Child labor in the United States [by] F. Adler.—Child labor in southern industry [by] A. J. McKelway.—Children in American street trades [by] M. E. Adams.—The test of effective child labor legislation [by] O. R. Lovejoy.—Child labor legislation and methods of enforcement in northern central states [by] H. Erickson.—Child labor legislation and enforcement in New England and the middle states [by] Mrs. Florence Kelley.—Child labor legislation in the South [by] N. L. Anderson.—Child labor legislation and methods of enforcement in the western states [by] B. B. Lindsey.—The work of the General federation of women's clubs [by] Mrs. A. O. Granger.—The operation of the new child labor law in New Jersey [by] H. F. Fox.—Child labor legislation [by] Jane Addams.—Child labor from the employer's point of view [by] E. G. Hirsch.—The school as a force arrayed against child labor [by] J. H. Kirkland.—Proceedings of the annual meeting of the National child labor committee.—Book department.—Municipal indebtedness: a symposium.
Also published as National child labor committee. Pamphlet no. 2.
HD6250.U3N2,no.2
- 321 ——— [Child labor a menace to industry, education and good citizenship. Proceedings of the second annual meeting.] Philadelphia, American academy of political and social science, 1906. 203 p. 26^{cm}. (The annals of the American academy of political and social science. vol. xxvii, no. 2) H1.A4,v.27
CONTENTS.—Child labor in the southern cotton mills [by] A. J. McKelway.—Child labor at the national capital [by] C. P. Nell.—Past and present arguments against child labor [by] J. G. Brooks.—The physical and physiological effects of child labor [by] G. M. Kober.—The federal government and the working children [by] Florence Kelley.—Child labor in the coal mines [by] O. R. Lovejoy.—Child labor in the glass industry [by] O. R. Lovejoy.—The child labor problem—

a study in degeneracy [by] A. J. McKelway.—The operation of the Illinois child labor law [by] Jane Addams.—Child labor a national problem [by] S. McC. Lindsay.—Organized labor's attitude toward child labor [by] S. Gompers.—Overwork, idleness or industrial education [by] W. Noyes.—Parental responsibility for child labor [by] G. Taylor.—The operation of the Wisconsin child labor law [by] E. W. Frost.—A business man's view of child labor [by] S. W. Woodward.—The essentials of a child labor law for the District of Columbia [by] H. J. Harris.—Proceedings of the second annual meeting of the National child labor committee.—Civic organizations and municipal parties—a symposium on reform organizations.—Book department.—Department of philanthropy, charities and social problems.

Also published as National child labor committee, Pamphlet no. 20.

HD6250.U3N2,no.20

- 322 **National child labor committee.** Child labor. Proceedings of the third annual meeting. Philadelphia, American academy of political and social science, 1907. 243 p. illus. 26^{cm}. (The annals of the American academy of political and social science. vol. XXIX, no. 1) H1.A4,v.29

CONTENTS.—Poverty and parental dependence as an obstacle to child labor reform [by] H. Folks.—The awakening of the South against child labor [by] A. J. McKelway.—Some of the ultimate physical effects of premature toll [by] A. H. Freiberg.—Child labor in the soft coal mines [by] O. R. Lovejoy.—The extent of child labor in the anthracite coal industry [by] O. R. Lovejoy.—Obstacles to the enforcement of child labor legislation [by] Florence Kelley.—National protection for children [by] Jane Addams.—The child labor laws of the Ohio Valley [by] J. H. Morgan.—The child labor situation in Ohio and border states [by] W. E. Miller.—Children in the glass works of Illinois [by] Harriet Van der Vaart.—Child labor and the public schools [by] N. C. Schaeffer.—The value of publicity in reform [by] A. T. Vance.—The enforcement of child labor legislation in Illinois [by] E. T. Davies.—Child labor and the public schools [by] S. McC. Lindsay.—Child labor and the public schools [by] C. W. Dabney.—Child labor and the nation [by] A. J. Beveridge.—The difficulties of a factory inspector [by] E. T. Davies.—The enforcement of child labor legislation [by] S. Cadwallader.—The attitude of society toward the child as an index of civilization [by] F. Adler.—Reports from state and local child labor committees and consumers' leagues.—The struggle against preventable diseases.—A symposium.

Also published as National child labor committee, Pamphlet no. 40.

HD6250.U3N2,no.40

- 323 — Child labor and social progress. Proceedings of the fourth annual meeting of the National child labor committee. Philadelphia, The American academy of political and social science, 1908. iv, 177 p. 26^{cm}. (Supplement to the Annals of the American academy of political and social science. July, 1908.) H1.A4,v.32

CONTENTS.—The basis of the anti-child labor movement in the idea of American civilization [by] F. Adler.—The new view of the child [by] E. T. Devine.—Social cost of accident, ignorance and exhaustion [by] C. R. Henderson.—The leadership of the child [by] A. J. McKelway.—Child labor in New England [by] E. W. Lord.—Compulsory education, the solution of the child labor problem [by] L. W. Parker.—Compulsory education in the South [by] G. F. Milton.—Why the children are in the factory [by] J. M. Gordon.—The education of mill children in the South [by] A. E. Seddon.—The function of education in abolishing child labor [by] O. R. Lovejoy.—Ethical and religious aspects of child labor [by] J. H. Kirkland.—The duty of the people in child protection [by] H. Smith.—Essentials in factory inspection [by] J. H. Morgan.—The responsibility of the consumer for child labor [by] Florence Kelley.—Children on the streets of Cincinnati [by] E. N. Clopper.—Reports from state and local child labor committees.—National child labor committee: Abstract of secretary's report and treasurer's report. For the year ending Sept. 30, 1907.—Proceedings of the fourth annual meeting.

Also published as National child labor committee, Pamphlet no. 69.

HD6250.U3N2,no.69

- 324 — The child workers of the nation. Proceedings of the fifth annual conference, Chicago, Illinois, January 21-23, 1909. New York, 1909. iv, 256 p. 23^{cm}. [Pamphlet no. 94] HD6250.U3N2,no.94

"The papers in this volume are reprinted from the March, 1909, supplement to the Annals of the American academy of political and social science, in which they were originally published as the Proceedings of the fifth annual conference on child labor held under the auspices of the National child labor committee, Chicago, Ill., January 21-23, 1909."

CONTENTS.—Conserving childhood, by A. S. Draper.—(1) Duty of a rich nation to take care of her children, by I. N. Seligman. (2) Duty of a rich nation to take care of her children, by C. R. Hen-

derson.—The Federal Children's bureau, a symposium, by L. D. Wald, Jane Addams, Leo Arns-stein, B. B. Lindsey, H. B. Favill, C. R. Henderson, Florence Kelley, S. McC. Lindsay.—Some unsettled questions about child labor, by O. R. Lovejoy.—The child and the law, by A. J. McKel-way.—Child labor in the textile industries and canneries of New England, by E. W. Lord.—Child labor in the Ohio Valley states, by E. N. Clopper.—Practical restrictions on child labor in textile industries; higher educational and physical qualifications, by Howell Cheney.—Scholar-ships for working children, by Mrs. Florence Kelley.—Some effects of improper posture in factory labor, by A. H. Freiberg.—Child labor and the juvenile court, by J. A. Britton.—Overworked children on the farm and in the school, by Woods Hutchinson.—Handicaps in later years from child labor, by W. E. Harmon.—Accidents to working children, by E. W. De Leon.—Uniform systems of child labor statistics, by John Williams.—The present situation in Illinois, by E. T. Davies.—The forward step in Louisiana, by J. M. Gordon.—The difficulties of child-labor legisla-tion in a southern state, by J. R. McDowell.—Reports from state and local child labor com-mittees.—National child labor committee, fourth annual report of the general secretary and treasurer.—The proceedings of the fifth annual conference on child labor.—State and local com-mittees in co-operation or affiliation with the National child labor committee.—Recent publica-tions of the National child labor committee.—Members of the National child labor committee.

- 325 **National child labor committee.** Child employing industries. Proceedings of the sixth annual meeting of the National child labor committee. Phila-delphia, The American academy of political and social science, 1910. v, 274 p. 26^{cm}. (Supplement to the Annals of the American academy of political and social science. March, 1910)

HI.A4,v.35
HD6250.U3N2

CONTENTS.—Annual address, by Felix Adler.—Child labor legislation in Massachusetts, by Curtis Guild, Jr.—Antagonistic forces—a symposium: 1. False economic ideas, by Charles F. Smith; 2. Unequal laws an impediment to child labor legislation, by S. McC. Lindsay; 3. Indi-ference of the church to child labor reform, by John Haynes Holmes; 4. Inadequate schools, by Everett W. Lord.—Justice to the child, by Stephen S. Wise.—Children in the textile industry, by John Golden.—The cotton mill a factor in the development of the South, by Mrs. J. Borden Harri-man.—The mill or the farm, by A. J. McKelway.—"Poor white folks," by Hooper Alexander.—The Federal children's bureau, by Owen R. Lovejoy.—Vocation—a symposium, by Everett W. Lord, David Snedden.—Enforcement of child labor laws, by Homer Folks.—Enforcement of child labor laws in South Carolina, by E. J. Watson.—Enforcement of child labor laws in New Hamp-shire, by Henry C. Morrison.—The health of young persons in Massachusetts factories, by William C. Hanson.—Child labor statistics, by Fred S. Hall.—Proof-of-age records, by Jeanie V. Minor.—The Providence school census system, by Gilbert E. Whittemore.—The Massachusetts bureau of statistics, by Frank S. Drown.—Child labor in street trades, by Edward N. Clopper.—Child labor in home industries, by Mary Van Kleeck.—New England's lost leadership, by Mrs. Florence Kelley.—Child labor in canneries, by Pauline Goldmark.—Relation of National child labor com-mittee to state and local committees, by Edward W. Frost.—Reports from state and local child labor committees.—Reports from Southern states, by A. J. McKelway.—Annual report of the general secretary.

- 326 ——— **Uniform child labor laws.** Proceedings of the seventh annual confer-ence of the National child labor committee. Philadelphia, The American academy of political and social science, 1911. v, 224 p. 25^{cm}. (Supplement to the Annals of the American academy of political and social science. July, 1911)

HI.A4,v.38
HD6250.U3N3

CONTENTS.—Child labor a menace to civilization.—Annual address, by Felix Adler.—The con-servation of childhood, by Theodore Roosevelt.—Standards proposed by United States commis-sion on uniform laws, by A. T. Stovall.—What should we sacrifice to uniformity? by Florence Kelley.—Seven years of child labor reform, by Owen R. Lovejoy.—The cotton mill: The Herd among industries, by A. J. McKelway.—The public school and the day's work, by Herman Schneider.—Child labor on the stage—a symposium, by Jane Addams, Henry B. Favill, and Jean M. Gordon.—Poverty and parental dependence in relation to child labor reform—a symposium: 1. Scholarships, by George A. Hall; 2. State child labor relief, by M. Edith Campbell; 3. The dinner toter, by Charles L. Coon.—Exclusion of children from dangerous trades, by William C. Hanson.—Child labor in street trades and public places—a symposium: 1. The nickel theatre, by Maurice Willows; 2. The newsboy, by George A. Hall; 3. The night messenger boy, by Edward N. Clopper; 4. Street trades and reformatories, by Richard K. Conant; 5. Street trades, by Florence Kelley.—History of child labor reform in Alabama, by B. J. Baldwin.—Child labor legisla-tion in the Carolinas, by John P. Hollis.—Child labor in the Gulf coast canneries, by Lewis W.

Hine.—The glass industry and child labor legislation, by Charles L. Chute.—The coal mines of Pennsylvania, by Owen R. Lovejoy.—New territory, by A. J. McKelway.—Ten years' experience in Illinois, by Jane Addams.—The forward movement in Missouri, West Virginia, and Indiana, by Edward N. Clopper.—The state and the nation in child labor regulation, by William E. Borah.—Reports from state and local child labor committees.—Annual report of the general secretary.

- 327 **National child labor committee.** Child labor and education. [Proceedings of the eighth annual conference] New York, National child labor committee [1912] cover-title, 3l., 223 p. diagrs. 23^{cm}. (The child labor bulletin, v. 1, no. 1) HD6250.U3N4

CONTENTS.—National aid to education, by Felix Adler.—A substitute for child labor, by P. P. Claxton.—Child labor and vocational work in the public schools, by E. O. Holland.—Child labor and vocational guidance, by Helen T. Woolley.—Child labor and the future development of the school, by C. G. Pearce.—The dangers and possibilities of vocational guidance, by Alice P. Barrows.—Relation of industrial training to child labor, by W. E. Elson.—Economic value of education, by M. Edith Campbell.—Need of compulsory education in the South, by W. H. Hand.—A federal children's bureau, by A. J. Peters.—Federal aid to education a necessary step in the solution of the child labor problem, by S. McC. Lindsay.—Part time schools, by Florence Kelley.—Social cost of child labor, by J. P. Frey.—Child labor and democracy, by A. J. McKelway.—Extending medical inspection from schools to mills, by G. F. Ross, M. D.—Child labor in the canneries of New York state, by Z. L. Potter.—How to interest young people, by Mrs. Frederick Crane.—The educational test for working children, by R. K. Conant.—A legislative program for South Carolina, by J. P. Hollis.—Rejuvenation of the rural school, by Ernest Burnham.—Rural child labor, by J. M. Gillette.—Symposium: Unreasonable industrial burdens on women and children, by Florence Kelley, Millie R. Trumbull, J. A. Ryan, Jean M. Gordon.—Report of the general secretary for seventh fiscal year.—Proceedings of the eighth annual conference.

- 328 — Child labor and poverty; the papers and addresses and discussions of the ninth National conference on child labor, held at Jacksonville, Fla., March 13–17, 1913, under the auspices of the National child labor committee. New York city, National child labor committee [1913] 2 p. l., 174 p. front. 23^{cm}. (The child labor bulletin, v. 2, no. 1) HD6250.U3N4

CONTENTS.—The child breadwinner and the dependent parent [by] Mrs. Florence Kelley.—Child wages in the cotton mills [by] Dr. A. J. McKelway.—Child labor and need [by] M. L. Boswell.—Child labor and poverty: both cause and effect [by] J. A. Kingsbury.—Shall charitable societies relieve family distress by finding work for children. A symposium: i [by] R. T. Solensten. ii [by] M. H. Newell.—Ancient standards of child protection [by] Rabbi David Marx.—Child labor and low wages [by] Jerome Jones.—The federal children's bureau [by] J. C. Lathrop.—How to make child labor legislation more effective [by] Dr. S. McC. Lindsay.—From mountain cabin to cotton mill [by] J. C. Campbell.—Social welfare and child labor in southern cotton mills [by] Rev. C. E. Weltner.—The textile industry and child labor [by] R. K. Conant.—The campaign in North Carolina. The mountain whites, by one of them [by] W. H. Swift.—The burden on children in shrimp and oyster canneries [by] L. W. Hine.—Neglected human resources of Gulf coast states [by] E. F. Brown.—Child labor and health [by] Dr. W. H. Oates.—Developing normal men and women [by] J. M. Gordon.—Conditions in child employing industries in the South. A symposium: Alabama: i [by] Mrs. W. L. Murdoch. ii Mississippi: [by] Mrs. E. L. Bailey. South Carolina: iii [by] J. A. McCullough. iv [by] E. F. Brown.—An eight-hour day in a ten-hour state [by] Henry Nichol.—Proceedings of the ninth National conference on child labor.

- 329 — Child labor a national problem; proceedings of the tenth annual conference on child labor, held at New Orleans, La., March 15–18, 1914, under the auspices of the National child labor committee. New York city, National child labor committee (incorporated) 1914. 2 p. l., 200 p. 23^{cm}. (The child labor bulletin. v. 3, no. 1) HD6250.U3N4

CONTENTS.—The child labor movement: a movement in the interests of civilization, by Felix Adler; The need of a constructive appeal, by Jane Addams; Protection for American children, by Florence Kelley; The abolition of child labor a national duty, by Felix Adler; National child labor standards, by Samuel McCune Lindsay; Law without enforcement, by A. J. McKelway; Child labor, a menace, by Pauline M. Newman; Enlightening the public, by Mrs. Percy V. Pennypacker; The child in the street, by James H. Blenk, Archbishop of New Orleans; Why overlook the street worker? by Edward N. Clopper; Cutting child labor out of the vicious circle, by Owen R. Lovejoy; The high cost of child labor, by Lewis W. Hine; Neglected childhood and defectiveness, by Alexander Johnson; Why it is hard to get good child labor laws in the South, by Wiley H. Swift; A report from South Carolina, by Joseph A. McCullough; Child labor reform

in Alabama, by Mrs. W. L. Murdoch; The last stand of the one business which opposes child labor legislation in the South [cotton manufactures] by Wiley H. Swift; The eight-hour day in Massachusetts factories, by Richard K. Conant; Tasks in the tenements, by Lewis W. Hine; Ideal child labor in the home, by Jessie P. Rich; Sixteen years of childhood for Ohio girls, by Ella M. Haas; Proper issuance of work permits, by George A. Hall; Woman's place in law enforcement, by Anna Herkner; European and American methods of training factory inspectors, by Herschel H. Jones; Enforcing officials and the courts, by Mornay Williams; Newspapers and child labor, by Anna Rochester; Cooperation of the schools in reducing child labor, by Frank M. Leavitt; Heckling the schools, by Edward N. Clopper; Agricultural labor and school attendance, by Harry M. Bremer; What is a child worth? by Josephine J. Eschenbrenner; Present needs and activities of the National child labor committee, by Owen R. Lovejoy; Proceedings of tenth annual conference; Directory of state and local child committees.

- 330 **National child labor committee.** Proceedings of the eleventh annual conference. Part 1, held at Washington, D. C., Jan. 1915. Part 2, held at San Francisco, Cal., May, 1915. New York, National child labor committee, 1915. 131 p. 23cm. (The child labor bulletin, v. 4, no. 1, 2) HD6250.U3N4

CONTENTS.—Part 1. Child labor and illiteracy, by Mrs. Florence Kelley; Cooperative administration of child labor laws, by A. Herkner; Effect of uniform labor standards on interstate competition, by H. P. Kendall; Demand for a square deal for the cotton manufacturers of the South, by David Clark, with discussion; Symposium on a national child's charter; Some secondary considerations, by W. H. Swift; Precedents for federal child labor legislation, by T. I. Parkman. Part 2. The child labor movement, by Felix Adler; Social responsibility for child labor, by Bishop Edwin H. Hughes; Enforcement in Wisconsin, by James D. Beck; Federal control of child labor, by Owen R. Lovejoy; Responsibility of the federal government, by Mrs. Florence Kelley; Child labor in the West; Some local child labor problems in California, by Lewis W. Hine; A charter for childhood: New ideals in the schools, Jessica B. Palxotto; The right to play, by E. D. DeGroot; The seven sins of child labor, by Felix Adler.

- 330a — Proceedings of the twelfth annual conference on child labor, Asheville, N. C., February 3-6, 1916. New York, National child labor committee, 1916. 78 p. 23cm. (The child labor bulletin, v. 5, no. 1.)

CONTENTS.—Vocational scholarships, by Lillian D. Wald; Attempted child labor legislation in North Carolina, by Zebulon Weaver; True preparedness in greater protection to childhood, by Samuel McCune Lindsay; Moving forward in Alabama, by Mrs. W. L. Murdoch; The effects of child labor on social standards, by Mrs. Thomas W. Lingle; The effect of child labor upon community life, by Eunice Sinclair; Pan-American child welfare, by Edward N. Clopper; Organized labor and child labor reform, by James F. Barrett; The citizen and the National child labor committee, by Josephine J. Eschenbrenner; Two conceptions of child employment, by Wiley H. Swift; Federal child labor legislation, by Edward Keating; Child labor in North Carolina, by Dr. George T. Winston; What will be left for the States to do after the Keating bill becomes a law? by Florence Kelley.

- 331 — 8th-11th annual reports of the general secretary. Owen R. Lovejoy. Child labor bulletin, Nov. 1912, v. 1: 1-25; Nov. 1913, v. 2: 12-32; Nov. 1914, v. 3: 8-29; Nov. 1915, v. 4: 144-154. HD6250.U3N4

For earlier reports see Proceedings of the committee.

- 332 — An address to the citizens of twelve states on the child labor laws you should enact in 1914. Child labor bulletin, Nov. 1913, v. 2, no. 3: 33-43.

HD6250.U3N4,v.2

- 333 — The campaign against child labor; a monthly department officially furnished. Woman's home companion, Jan.-Oct. 1907, v. 34: 24; 58-59; 46-47; 28; 24, 57; 22; 20; 22; 25; 13. AP2.W714,v.34

- 334 — Can we afford child labor? Including the exhibit handbook prepared to accompany the twenty-five panel exhibit at the exposition in San Francisco. New York city, National child labor committee, incorporated, 1915. 48 p. illus., diags. 22½cm. (The child labor bulletin, v. 3, no. 4)

HD6250.U3N4

CONTENTS.—Notes.—Book review [by] Anna Rochester.—Girls at work and why they work [by] Helen C. Dwight.—Child flower-makers in New York tenements [by] Eleanor H. Adler.—What the government says about cotton mills [by] Anna Rochester and Florence Taylor.—The high cost of child labor; exhibit handbook, with photographs by the staff photographer, Lewis W. Hine.

- 335 National child labor committee.** Child labor, a study course on its extent, causes, effects, and prevention. New York city, National child labor committee [1912?] 40 p. 23^{cm}. (National child labor committee. Pamphlet no. 183)
- 336 ———** The child labor bulletin. Pub. by National child labor committee. v. 1, June, 1912-v. 5, May, 1916. New York, 1912-1916. 5 v. 23^{cm}.
HD6250.U3N4
- 337 ———** Child labor facts for sermon use. New York city, 1915. 4 p. 23^{cm}. (Its Pamphlet no. 239, Jan. 1915) HD6250.U3N2,no.239
- 338 ———** Child labor in 1912. New York, National child labor committee, 1912. 84 p. 23^{cm}. (The child labor bulletin, v. 1, no. 3) HD6250.U3N4,v.1
CONTENTS.—Child labor in 1912. Eighth annual report of National child labor committee.—Home work in the tenement houses of New York city, by Owen R. Lovejoy; Elizabeth C. Watson.—Employment of children on the stage, by Owen R. Lovejoy. A study course on child labor.
- 339 ———** Child labor, statistics, causes, effects, prevention. New York city [1912?] 22 p. 23^{cm}. (Its Pamphlet no. 185)
- 340 ———** Child labor stories for children. New York city, National child labor committee [1913] 81 p. illus. (1 col.) 23^{cm}. (The child labor bulletin, v. 2, no. 2) HD6250.U3N4,v.2
CONTENTS.—A song of the factory [by] J. F. Montague.—The story of the medicine bottle.—Hymn for the working children [by] Fanny J. Crosby.—The story of my cotton dress.—Dolly dear.—Mr. Coal's story.—"To little sister."—Declaration of dependence.—The toll.—Two little members.—What some children have done for the working children.—The story of old [by] Jemima Lake.—We need love's tender lesson taught [by] Whittier.—Child labor in Georgia, a story for grownups [by] A. J. McKeelway.
- 341 ———** Child labor ten years after. New York, National child labor committee, 1914. 75 p. 23^{cm}. (Child labor bulletin, v. 3, no. 3) HD6250.U3N4,v.3
CONTENTS.—Editorial notes; Tenth annual report of the General secretary; The extent of child labor officially measured, by Edward N. Clopper; Child labor and delinquency, by Fred S. Hall; Children who weave silk, by Eleanor H. Adler; Mortality among cotton operatives, by Florence Taylor; Dangerous machines in the metal trades, by Helen C. Dwight.
- 342 ———** Child labor in canneries . . . with other special articles. New York city, National child labor committee, 1913. 3 p. l., 95 p. incl. plates, maps. 23^{cm}. (The child labor bulletin, v. 1, no. 4) HD6250.U3N4,v.1
CONTENTS.—Child labor and poverty: advance program of the 9th National conference on child labor.—The important provisions of existing child labor laws.—Child labor in New York canning factories [by] E. F. Brown.—Day and night in a vegetable canning factory: a personal experience [by] J. J. Eschenbrenner.—Photographic reproductions of children in fruit and vegetable, oyster, and shrimp canneries.—Child labor and health [by] O. R. Lovejoy.—Some dangers in the present movement for industrial education [by] John Dewey.—Overwork, idleness or industrial education [by] William Noyes.—The child that toiled not; a reply to Mr. Dawley.
- 343 ———** The clicker, and some other children. New York, National child labor committee, incorporated, 1914. 62 p. illus., pl. 23^{cm}.
"Stories and verse about children who work."—Foreword. HD6250.U3N5 1914
- 344 ———** Constitution. American academy of political and social science, Annals, Supplement, July, 1911, v. 38:202-207. H1.A4,v.38
National child labor committee. Pamphlet no. 148. 4 p.
HD6250.U3N2,no.148
- 345 ———** The eight-hour day and prohibition of night work. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35:239-274. H1.A4,v.35
National child labor committee. Pamphlet no. 137. 36 p.
HD6250.U3N2,no.137

- 346 **National child labor committee.** The federal child labor bill; program of tenth annual conference on child labor, New Orleans, La., March 15-18, 1914, with a copy of the federal child labor bill and a memorandum on its constitutionality. New York city, National child labor committee, 1914. 79 p. illus., col. diagr. 23^{cm}. (The child labor bulletin, v. 2, no. 4) HD6250.U3N4
 CONTENTS.—Editorial notes.—Program of tenth annual conference on child labor.—Federal government and child labor, and memorandum on the Palmer child labor bill [by] O. R. Lovejoy.—Ten years of child labor reform in the South [by] A. J. McKelway.—The eight-hour day [by] Anna Rochester.—The majesty of the law in Mississippi [by] E. N. Clopper.—Present conditions in the South [by] L. W. Hine.—Strawberry pickers of Maryland [by] H. M. Bremer.—The work of England's certifying surgeons [by] H. H. Jones.
- 347 ——— High cost of child labor . . . exhibit handbook. [New York city, 1915] 20 p. 23^{cm}. (*Its Pamphlet no. 241*, Jan. 1915) HD6250.U3N2,no.241
 High cost of child labor. Reprint of exhibit handbook. Child labor bulletin, Feb. 1915, v. 3: 25-45. HD6250.U3N4,v.3
- 348 ——— How to obtain foreign birth certificates. National child labor committee. New York, 1909. Pamphlet no. 116. 8 p. HD6250.U3N2,no.116
- 349 ——— Leaflet[s] New York, 1904-1913. 38 pams. illus. 15½^{cm}. HD6250.U3N19
- 350 ——— Little comrades who toil. New York city, 1914. 84 p. 23^{cm}. (Child labor bulletin, Aug. 1914, v. 3, no. 2, pt. 1) HD6250.U3N4,v.3
- 351 ——— Pamphlet[s]. National child labor committee. New York, 1905-1916. 260 pams. illus. 23-24^{cm}. HD6250.U3N2
 The pamphlets, which are consecutively numbered, comprise addresses and proceedings (reprinted from the "Proceedings"), annual reports, etc.
- 352 ——— Stories about the other child. [New York, 1913] 79 p. 25^{cm}. (Supplement to the Child labor bulletin. v. 2, no. 3, Dec. 1913) HD6250.U3N4,v.2
- 353 ——— The voice of the church against child labor. National child labor committee. New York, 1908. Pamphlet no. 89. [4] p. HD6250.U3N2,no.89
- 354 **National conference of charities and correction.** Proceedings. Boston [etc.] 1875-1915. ports., map, tables. 22½-24^{cm}.
 ——— A guide to the study of charities and correction by means of the Proceedings of the National conference of charities and correction, using thirty-four volume 1874 to 1907. Comp. by Alexander Johnson. [Indianapolis?] 1908. xi, 353 p. 23^{cm}. HV88.A3
 Child labor: p. 144-150. See also Indexes to subsequent volumes.
- 355 **National consumers' league.** The consumer's control of production: the work of the National consumers' league. Philadelphia, The American academy of political and social science, 1909. 1 p.l., 83 p. 25½^{cm}. (Supplement to the Annals of the American academy of political and social science. July, 1909) HD6957.U6N3
 II.A.4,v.34
 PARTIAL CONTENTS.—Work at night by girls and boys under 21 years. The eight hours day for working children. Investigations. (a) The standard of living of working girls and women away from home. (b) Children illegally at work.
- 356 **National federation of settlements.** Young working girls; a summary of evidence from two thousand social workers, ed. by Robert A. Woods and Albert J. Kennedy, its secretaries; with an introduction by Jane Addams. Boston and New York, Houghton Mifflin company, 1913. xiii, 185, [1] p. 19½^{cm}. HQ798.N3
- 357 **Nearing, Scott.** The history of a Christmas box. Charities and the Commons, Dec. 29, 1906, v. 17: 555-558. HV1.C4,v.17

- 358 **Nearing, Scott.** Social adjustment. New York, The Macmillan company, 1911. xvi p., 1 l., 377 p. 19½^{cm}. HN64.N42
Child labor, p. 243-265.
- 359 ——— Social religion; an interpretation of Christianity in terms of modern life. New York, The Macmillan company, 1913. xvi p., 2 l., 227 p. 19½^{cm}.
The factory child: p. 73-88. HN31.N4
- 360 ——— The solution of the child labor problem. New York, Moffat, Yard and company, 1911. viii, 145 p. 18½^{cm}. HD6231.N4
- 361 **Neill, Charles Patrick.** Child labor at the national capital. [Philadelphia? 1906?] 11 p. 23^{cm}. HD6250.U4D6 1906a
Also published as National child labor committee. Pamphlet no. 20, p. 12-22; Pamphlet no. 21. 11 p. HD6250.U3N2,no.20,21
Charities and the Commons, Mar. 3, 1906, v. 15: 795-800. HV1.C4,v.15
(In U. S. Congress. House. Committee on the District of Columbia. Report of hearings . . . 1906, . . . to regulate child labor in the District of Columbia . . . Washington, 1906. 23^{cm}. p. 55-59) LC132.D6A3
- 362 **New Jersey. Bureau of statistics of labor and industries.** 26th Annual report, 1903. Trenton, 1903. illus. 23½^{cm}. HC107.N5A2
The social aspect of child labor in New Jersey, 1903: p. 241-421.
- 363 ——— **Inspector of child labor.** Annual report, 1st, 1883. Trenton, N. J., 1883. 1 v. 22½^{cm}. HD6250.U4N5
- 364 **New York (State) Bureau of labor statistics.** Conditions of entrance and advancement in individual industries. (In its 26th annual report, 1908. Pt. 1: p. 51-189) HC107.N7A3 1908
- 365 ——— **Factory investigating commission.** Preliminary report. Transmitted to the Legislature March 1, 1912. Albany, The Argus company, printers, 1912. 3 v. plates (part fold.) diags. 23^{cm}. HD8053.N7A4 1912
Robert F. Wagner, chairman.
The appendices are issued also separately, as reprints.
Child labor: Extent of child labor in New York state: v. 1, p. 101-106; Appendix VII: Home work in the tenement houses of New York city, Memoranda by Owen R. Lovejoy, Elizabeth C. Watson; Photographs: p. 571-584. Answers to Questionnaire on Employment of women and children: p. 646-649. See also Index of witnesses: v. 2, p. iii-xxvi for references to child labor.
- 366 ——— Second report. Transmitted to the Legislature January 15, 1913. Albany, J. B. Lyon company, printers, 1913. 2 v. plates, plans, diags. (part fold.) 23^{cm}. [Legislature, 1913. Senate doc. 36] HD8053.N7A5 1913
Robert F. Wagner, chairman.
Report: Child labor in the canneries: p. 127-143; Child labor: p. 176-192. Report on manufacturing in tenements in New York state, by Elizabeth C. Watson, v. 2, p. 667-755; Industrial conditions in the canning industry of New York state, by Z. L. Potter, v. 2, p. 757-915; Preliminary report on employment of women and children in mercantile establishments, by Pauline Goldmark and George A. Hall, v. 2, p. 1193-1270.
See also Indexes to Third and Fourth reports.
- 367 **New York child welfare exhibit, 1911.** Handbook of the New York child welfare exhibit in the 71st regiment armory from Jan. 18 to Feb. 12, 1911. [New York, Blanchard press, 1911] 82 p. illus. 24^{cm}. HV709.N5 1911
Work and wages, p. 33-35.
- 368 **Newell, Mary H.** Shall charitable societies relieve family distress by finding work for children? Child labor bulletin, May, 1913, v. 2, no. 1: 39-41. HD6250.U3N4,v.2
- 369 **Nichol, Henry.** An eight-hour day in a ten-hour state [Tennessee]. Child labor bulletin, May, 1913, v. 2, no. 1: 142-144. HD6250.U3N4,v.2

- 370 **North Carolina. Bureau of labor and printing.** Annual report. 20th-27th. 1906-1913. Raleigh, N. C. [etc.] 1906-1913. 8 v. plates, tables. 24 $\frac{1}{2}$ "^m. HC107.N8A2
1906-1908: Contain letters from wage-earners, manufacturers, mill men, editors and publishers, and farmers in regard to child labor.
1913: Statistics of average wages paid children, 1909-1912: p. 200-212.
- 371 **Noyes, William.** Overwork, idleness, or industrial education? American academy of political and social science, Annals, Mar. 1906, v. 27: 342-353. H1.A4,v.27
National child labor committee. Pamphlet no. 29, p. 84-95; Pamphlet no. 32. 2d ed. 1907. 12 p. HD6250.U3N2,no.20;no.32
- 372 **Obenauer, Marie Louise, and Mary Conyngton.** Employment of children in Maryland industries. (In U. S. Bureau of labor. Bulletin, Sept. 1911, no. 96: 466-487) HD6051.A5,no.96
- 373 ——— and **Bertha von der Nienburg.** Effect of minimum-wage determinations in Oregon. Washington, Govt. print. off., 1915. 106 p. 23"^m. (Bulletin of the United States Bureau of labor statistics, whole no. 176. Women in industry series, no. 6) HD6051.A62,no.176
Issued also as House doc. 1709, U. S., 63d Cong., 3d sess. Rates of pay before and after minimum wage determinations of girls under 18 years of age: p. 19-20.
- 374 **Ohio. Industrial commission. Dept. of investigation and statistics.** Industrial accidents in Ohio, January 1, 1914, to June 30, 1915. Columbus, O., 1916. 231 p. 23 $\frac{1}{2}$ "^m. (Its Report no. 21)
Also forms Bulletin of the Industrial commission, v. 3, no. 1, Mar. 1, 1916.
Includes statistics of accidents to minors under 18 years of age.
- 375 **Oregon. Board of inspectors of child labor.** Report. Salem, Or. 1913-15. 2 v. 23"^m. HD6250.U407
- 376 ——— **Child welfare commission.** Biennial report, 1913-14. [Portland? Or.] 1915. 23"^m.
- 377 ——— **Industrial welfare commission.** Biennial report. 1st, 1913-14, Salem, Or., 1915. 15 p. 23"^m. HD6093.O72
- 378 **Pennsylvania. Governor, 1915. (Martin G. Brumbaugh)** Inaugural address, Jan. 19, 1915. Harrisburg, Pa., W. S. Ray, 1915. 11 p. 23"^m.
Child labor recommendations: p. 9. J87.P42 1915 Jan.19
- 379 **Pennsylvania child labor committee.** Child labor and the people of Pennsylvania. Third annual report, 1906-7. Philadelphia, Pennsylvania child labor committee 1907. 31 p. 15 $\frac{1}{2}$ "^m. (Child labor leaflet, no. 2) HD6250.U4P6
- 380 **Pennsylvania three-ply child labor campaign.** Survey, Mar. 18, 1911, v. 25: 993-994. HV1.C4,v.25
Glass factories: messengers: mines.
- 381 **Pratt, E. E.** Child labor: a rational statement. Arena, June, 1907, v. 37: 613-619. AP2.A6,v.37
- 382 **Pray, K. L. M.** Child labor, mothers, and manufacturers. Survey, Mar. 27, 1915, v. 33: 865. HV1.C4,v.33
- 383 **The Problem of child labor with special reference to Philadelphia.** Addresses by Samuel Zane Batten; Charles Edwin Fox; Henry J. Gideon; Joseph H. Hegedorn; and Mrs. Florence Kelley. City club of Philadelphia. City club bulletin, Feb. 5, 1913, v. 6: 216-224. JS1216.C47,v.6
- 384 **Progressive party. New York. Legislative committee.** Statement as to the official proposal of the National progressive party in the state of New York for a minimum wage act (also containing the text of the party's official bill) prepared for introduction into the Legislature of the state of New York. [New York] The Legislative committee of the National progressive party in the state of New York, 1913. 14 p. 23"^m. [Its Publications, 6] HD4918.P8

- 385 **Rauchberg, Heinrich.** Die Erhebung über Frauen- und Kinderarbeit in den Vereinigten Staaten. Archiv für soziale Gesetzgebung und Statistik, 1898, v. 12: 135-147. H5.A8,v.12
- 386 **Rhode Island. Bureau of industrial statistics.** Fifth annual report, 1891. Providence: E. L. Freeman & son, 1892. xiv, 191 p. 23^{cm}. HC107.R4A2 1891
- CONTENTS.—Laws of the several states relative to the employment and education of children, p. 3-21; Opinions and remarks of superintendents, members of committees, principals and teachers of schools, clergymen, and physicians relative to child labor, p. 22-62; Census of children employed by occupations, age, place of birth, parent nativity, and sex, p. 63-165; Wages of children, p. 166-181; School attendance and absentees, p. 185-188.
- 387 **Richmond, Mary Ellen.** The good neighbor in the modern city. Philadelphia and London, J. B. Lippincott company, 1907. 152 p., 1 l. 16 $\frac{1}{2}$ ^{cm}. (Sage foundation publication) HV4028.R53
- The child at work, p. 44-53.
- 388 **Roberts, Peter.** Child labor in eastern Pennsylvania. Outlook, Dec. 17, 1904, v. 78: 982-985. AP2.O8, v.78
- 389 **Robinson, Clarence C.** The wage-earning boy. New York [etc.] Association press, 1912. 108 p. 17 $\frac{1}{2}$ ^{cm}. Bibliography: p. [106]-108.
- 390 **Rochester, Anna.** The eight-hour day for children. National child labor committee. New York, 1914. Pamphlet no. 212. 16 p. HD6250.U3N2,no.212
- Reprinted from Child labor bulletin, Feb. 1914, v. 2, no. 4. HD6250.U3N4,v.2
- 391 ——— What do American people want for their children? Survey, Apr. 11, 1914, v. 32: 49. HV1.C4,v.32
- 392 **Roosevelt, Theodore.** The conservation of childhood. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 8-16. H1.A4,v.38
- National child labor committee. Pamphlet no. 163. 8 p. HD6250.U3N2,no.163
- 393 ——— The conservation of womanhood and childhood. Outlook, Dec. 23, 1911, v. 99: 1013-1019. AP2.O8,v.99
- 394 ——— The conservation of womanhood and childhood. New York and London, Funk & Wagnalls company, 1912. 2 p. l., 84 p. 14 $\frac{1}{2}$ ^{cm}. [The leather-bound pocket series] HD6095.R7
- 395 ——— Where I stand on child labor reform. Woman's home companion, Jan. 1907, v. 34: 15. AP2.W714,v.34
- 396 **Roseboro, Viola and Marie Best.** Nora Mahoney—a human document: a true story of child slavery in Philadelphia. Woman's home companion, Aug. 1906, v. 33: 3-4. AP2.W714,v.33
- 397 **Ross, William Edward.** What do you care? Pearson's magazine, Apr. 1913, v. 29: 482. AP2.P35,v.29
- National child labor committee, New York. Leaflet no. 49, Sept. 1913. HD6250.U3N19,no.49
- 398 **Sanville, F. L.** Daybreak for Pennsylvania's working children. Survey, Feb. 6, 1915, v. 33: 481-486. HV1.C4,v.33
- 399 **Seligman, Isaac N.** Duty of a rich nation to take care of her children. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 15-19. H1.A4,v.33
- National child labor committee. Pamphlet no. 111. 5 p. HD6250.U3N2,no.111

- 400 **Sewall, Hannah B.** Child labor in the United States. U. S. Bureau of labor. Bulletin, May, 1904, no. 52: 485-637. HD8051.A5,no.52
- 401 **Smith, Charles F.** False economic ideas: an obstacle to child labor reform. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 13-15. H1.A4,v.35
National child labor committee. Pamphlet no. 133. 3 p. HD6250.U3N2,no.133
- 402 **Smith, Hoke.** The duty of the people in child protection. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 97-100. H1.A4,v.32
National child labor committee. Pamphlet no. 79. 4 p. HD6250.U3N2,no.79
- 403 **Smyth, Ellison A.** Child labor in the South. Outlook, Mar. 30, 1907, v. 85: 769-771. AP2.O8,v.85
- 404 **Solensten, E. T.** Shall charitable societies relieve family distress by finding work for children? Child labor bulletin, May, 1913, v. 2, no. 1: 35-39. HD6250.U3N4,v.2
- 405 **Sorge, F. A.** Frauen- und Kinderarbeit in den Vereinigten Staaten. Neue Zeit, Mar. 5, 12, 1904, 22. Jahrg.: 716-723; 757-765. HX6.N6,v.22
- 406 **Southern conference on woman and child labor.** [Proceedings] 1913. [Memphis, 1913] 24 p. 23^{cm}.
- 407 **Spahr, Charles B.** America's working people. New York, London, and Bombay, Longmans, Green and co., 1900. vi p., 1 l., 261 p. 20^{cm}. HD8072.S72
Factory towns in New England: Child labor: p. 8-9; Child labor at the South: p. 36-41.
- 408 **Spargo, John.** The bitter cry of the children; with an introduction by Robert Hunter. New York, London, The Macmillan company, 1906. xxiii, 337 p. front., plates, facsim., diagrs. 20^{cm}. HV713.S7
The working child: p. 126-217; Remedial measures: (child labor: p. 256-260; A commissioner of charities on child labor: p. 305-306; Notes and authorities; The working child: p. 314-319.
- 409 **Stratton, George Frederic.** The man behind the child. Outlook, Sept. 20, 1913, v. 105: 137-140. AP2.O8,v.105
Answered by A. J. McKelway. The child against the man.
- 410 **Sumner, Mary Brown.** What the government found when it broadened out its interest in boll-weevils and began to study children. Survey, Dec. 16, 1911, v. 27: 1375-1377. HV1.C4,v.27
- 411 **Swan, Charles Herbert.** Le travail des enfants aux États-Unis d'Amérique. Revue économique internationale, July, 1906, v. 3: 69-115. HB3.R5,1906,v.3
- 412 **Swift, W. H.** The campaign in North Carolina. The mountain whites—by one of them. Child labor bulletin, May, 1913, v. 2, no. 1: 96-104. HD6250.U3N4,v.2
National child labor committee. Pamphlet no. 200, 1913. HD6250.U3N2,no.200
- 413 **Talbert, Ernest Lynn.** Opportunities in school and industry for children of the stockyards district. Chicago [University of Chicago press] 1912. vi, 64 p. 24^{cm}. (A study of Chicago's stockyards community . . . an investigation carried on under the direction of the Board of the University of Chicago settlement. 1) HN80.C5B6
- 414 **Taylor, Graham.** Parental responsibility for child labor. American academy of political and social science, Annals, Mar. 1906, v. 27: 354-356. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 96-98; Pamphlet no. 33. 2d ed. 1907. 3 p. HD6250.U3N2,no.20;no.33

- 415 Tennessee. Dept. of shop and factory inspection.** First annual report. v. 1 and suppl. Nashville, Tenn., Benson ptg. co., 1914. 2 v. 22^{cm}.
HD3663.T2A2&suppl.
Special child labor report—Results of enforcement of minor labor laws: suppl. p. 6-13.
- 416 Todd, Helen M.** Why the children work. The children's answer. McClure's magazine, Apr. 1913, v. 40: 68-79. AP2.M2,v.40
- 417 Tompkins, Juliet Wilbor.** Turning children into dollars. Success magazine, Dec. 1905, v. 8: 799-801, 859-860; Jan. 1906, v. 9: 15-17, 45-56.
HIF5386.A2S4,v.8,9
- 418 Towson, C. B.** The employer of boys. (*In* Applied ideals in work with boys, by C. W. Crampton, and others. New York, 1910. 18^{cm}. p. 239-256)
HQ797.A7
- 419 Ulm, Aaron Hardy.** The plea of the child laborer. North American review, June, 1909, v. 189: 890-899. AP2.N7,v.189
- 420 U. S. Bureau of labor.** Index of all reports issued by bureaus of labor statistics in the United States, prior to March 1, 1902. Washington, Govt. print. off., 1902. 287 p. 23^{cm}
Z7164.L1U6
HD8053.A25 1902
Contains references to the material on child labor contained in the various reports.
- 421 ————** Report on condition of woman and child wage-earners in the United States. In 19 volumes. Prepared under the direction of Chas. P. Neill, commissioner of labor. Washington, Govt. print. off., 1910-13. 19 v., tables. 23^{cm}. (61st Cong., 2d sess. Senate. Doc. 645) HD6093.A4
CONTENTS.—I. Cotton textile industry. 1910.—II. Men's ready-made clothing. 1911.—III. Glass industry. 1911.—IV. The silk industry. 1911.—V. Wage-earning women in stores and factories. 1910.—VI. The beginnings of child labor legislation in certain states; a comparative study . . . by Elizabeth Lewis Otey. 1910.—VII. Conditions under which children leave school to go to work. 1910.—VIII. Juvenile delinquency and its relation to employment. 1911.—IX. History of women in industry in the United States . . . by Helen L. Sumner. 1910.—X. History of women in trade unions . . . by John B. Andrews and W. D. P. Bliss. 1911.—XI. Employment of women in the metal trades . . . by Lucian W. Chaney. 1911.—XII. Employment of women in laundries. 1911.—XIII. Infant mortality and its relation to the employment of mothers. 1912.—XIV. Causes of death among woman and child cotton-mill operatives . . . by Arthur R. Perry, M. D. 1912.—XV. Relation between occupation and criminality of women, by Mary Conynghton. 1911.—XVI. Family budgets of typical cotton-mill workers . . . by Wood F. Worcester and Daisy Worthington Worcester. 1911.—XVII. Hookworm disease among cotton-mill operatives . . . by Ch. Wardell Stiles. 1912.—XVIII. Employment of women and children in selected industries. 1913.—XIX. Labor laws and factory conditions. 1912.
- 422 ————** Work and wages of men, women, and children. Washington, Govt. print. off., 1897. 671 p. 23^{cm}. (Annual report of the commissioner of labor, 11th, 1895-96) HD8051.A3 1895-96
Carroll D. Wright, commissioner.
Issued also in the Congressional series, no. 3545, as House Doc. 341, 54th Cong., 2d sess.
Contains statistics relative to the occupations and earnings of women and children; relative efficiency of women and children and of men engaged in same occupations; comparison of earnings of women and children and of men of the same grade of efficiency; reasons for the employment of women and girls.
- 423 ————** Bureau of labor statistics. Summary of the report on condition of woman and child wage earners in the United States. December, 1915. Washington, Govt. print. off., 1916. 445 p. 23^{cm}. (Bulletin of the United States Bureau of labor statistics, whole no. 175. Women in industry series, no. 5)
HD8051.A62,no.175
- 424 ————** Children's bureau. Annual report. 1st-3d, 1913-1915. Washington, Govt. print. off., 1914-16. 3 v. 23^{cm} HV741.A3
1913: Child labor studies: p. 9-10, 14-15.
1914: Child labor: p. 11-12.
1915: Physical standards for industry: p. 21-24.

- 425 **U. S. Industrial commission.** Reports. Washington, Government printing office, 1900-1902. 19 v. 23^{cm}. HC101.A3
Vols. 5, 7, 9, 12-17, 19, contain Evidence, etc., on child labor.
- 426 **Valeah, Eva McDonald.** Three notable lines of labor work. American federationist, Nov. 1901, v. 8: 457-462. HD8055.A5A2,v.8
Child labor, p. 459-462.
- 427 **Van Vorst, Bessie** "*Mrs. John Van Vorst.*" The cry of the children; human documents in the case of the new slavery. Saturday evening post, Mar. 10, Apr. 14, 28, May 5, 19, July 7, 28, Aug. 18, 1906, v. 178: 1-3, 28-29; 3-5; 10-11; 11-13; 12-13; 26-27; v. 179: 12-13; 17-18; 17-18. AP2.S2,v.178,179
- 428 ——— The cry of the children; a study of child-labor; with an introduction by Albert J. Beveridge. New York, Moffat, Yard and company, 1908. xiii, 9-246 p. 194^{cm}. HD6250.U3V3
- 429 ——— and **Marie Van Vorst.** The woman who toils; being the experiences of two ladies as factory girls. New York, Doubleday, Page & company, 1903. ix p., 3 l., 303 p. front., plates, ports. 20 1/2^{cm}. HD6068.V2
CONTENTS.—Van Vorst, Mrs. J.: Introductory. In a Pittsburg factory. Perry, a New York mill town. Making clothing in Chicago. The meaning of it all.—Van Vorst, M.: Introductory. A maker of shoes at Lynn. The southern cotton mills. The child in the southern mills.
The Library of Congress has also the French ed. HD6068.V23
- 430 **Wald, L. D.** Children and work. Atlantic monthly, June, 1915, v. 115: 806-817. AP2.A8,v.115
- 431 **Walling, William English.** Child labor in the North: a great national evil. Ethical record, Dec. 1902-Jan. 1903, v. 4: 39-42. BJ1.E6,v.4
- 432 **Watson, E. J.** South Carolina and the child labor problem. An address at Boston, Jan. 14, 1910, before the National child labor conference. (*In* South Carolina. General assembly. Reports and resolutions. Columbia, S. C., 1910. 24^{cm}. v. 3, p. 379-388.) J87.S6 1910p,v.3
- 433 **Watson, Frank D.** The child labor situation in Pennsylvania. Charities and the Commons, Mar. 30, 1907, v. 17: 1110-1112. HV1.C4,v.17
- 434 **Waudby, William S.** Children of labor. Frank Leslie's popular monthly, Apr. 1903. v. 55: 545-556. AP2.A346,v.55
- 435 **Wayne, Flynn.** Shall our children be foot-pounds of mechanical power? National magazine, Boston, Apr. 1914, v. 40: 147-150. AP2.N34,v.40
- 436 **Weaver, Eli W.** Getting in touch with the employer. Journal of education, Apr. 10, 1913, v. 77: 396-398. L11.J5,v.77
- 437 **Wells, Emilie Louise.** Woman and child wage earners in the United States. American economic review, June, 1912, v. 2: 436-442. HB1.E26,v.2
- 438 **Weyl, Walter Edward and A. M. Sakolaki.** Conditions of entrance to the principal trades. (*In* U. S. Bureau of labor. Bulletin 67. Washington, 1906, p. 680-780) HD8051.A5,no.67
The employment of women and children: p. 720-731.
- 439 **White, Frank Marshall.** The babies who work. Harper's weekly, Jan. 8, 1910, v. 54: 12-13. AP2.H32,v.54
- 440 **White child slavery; a symposium:** I. Helen Campbell. II. Solomon Schindler. III. Florence Kelley Wischniewetzky. IV. Jennie June (Jane C. Cooley) V. A. A. Chevallier. VI. C. Orchardson. Arena, April, 1890, v. 1: 589-603. AP2.A6,v.1

- 441 **Willoughby, William Franklin.** I. Child labor, by William F. Willoughby.
II. Child labor, by Miss Clare de Graffenried. [Baltimore]: American economic association, 1890. 149 p. 23^{cm}. (Publications of the American economic association. [Monographs] v. 5, no. 2) HB1.A5,v.5,no.2
The first paper by William F. Willoughby is treated under the following divisions: Introduction. Child labor in England. Child labor in the United States. The political economy of child labor, and Social aspect of child labor.
- 442 **Wilmarth, Raymond O.** Child labor, District of Columbia. Survey, Sept. 11, 1909, v. 22: 813-814. HV1.C4,v.22
- 443 **Wilmer, O. B.** Humanity and economics, with special reference to child labor. (In National conference of charities and correction. Proceedings, 1903. [Columbus, O.] 1903. 23^{cm}. p. 166-180) HV88.A3 1903
- 444 **Wisconsin. Bureau of labor and industrial statistics.** Biennial report. Madison, 1884-1911. 23½^{cm}. HC107.W6A2
8th, 1897-98: Special inspections; Child labor: p. 490-554.
9th, 1899-1900: Child labor in the United States: p. 264-406.
14th, 1909-1910: Child labor in Wisconsin: p. 499-574.
15th, 1910-11: Child labor: p. 59-96.
- 445 ——— Child labor. [From the Ninth biennial report of the Bureau of labor and industrial statistics of Wisconsin] Madison, Democrat printing company, state printer, 1900. cover-title, [263]-406 p. 22½^{cm}. HD6250.U4W6 1900
Child labor in England, p. 275-286.
Child labor in Wisconsin during 1898 and 1899, p. 287-384.
"The child labor law and the state as *parens patriae*. By August Charles Backus": p. 385-404.
- 446 ——— **Industrial commission.** Bulletin. v. I. Madison, Wis., 1912. 300 p. 22½^{cm}. IID8053.W6A3
PARTIAL CONTENTS.—No. 2. Child labor law: Essential points of the law; Opinions of courts and experts; List of books and articles.
No. 4. The Industrial commission and its predecessors; Child labor: p. 183-188; Street trades, p. 189-190; Compulsory education, p. 191-201; Apprenticeship, p. 202-206.
No. 4A. Apprenticeship law.
No. 5. Compulsory school attendance. Essential points of the law; Comment and explanation; Opinions of the courts.
- 447 ——— Women and children in industry. Data for women's clubs and other civic organizations. [Madison, 1914] 22 p. 23^{cm}. HD6095.W6
Bibliography: p. 11-22.
- 448 **Wise, Stephen S.** Justice to the child. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 35-41. H1.A4,v.35
National child labor committee. Pamphlet no. 135. 7 p. HD6250.U3N2,no.135
- 449 ——— United States should abolish child labor. Pacific monthly, Aug. 1909, v. 22: 127-130. AP2.P15,v.22
- 450 **Womer, Parley Paul.** The church and the labor conflict. New York, The Macmillan company, 1913. x p., 1 l., 302 p. 20^{cm}. HD6338.W7
The protection of the wage-earning woman and child: p. 162-183.
- 451 **Wood, Mrs. Mary I. (Stevens)** The history of the General federation of women's clubs for the first twenty-two years of its organization. New York, The History department, General federation of women's clubs [1912] x, 445 p. front., ports., facsim. 21^{cm}. HQ1903.G6W7
Arousing sentiment for the working child, p. 144-148, 173-174, 201, 233.
- 452 **Woodward, Margaret.** Welfare of the child who works. Suburban life, Jan. 1914, v. 18: 42-43. AP2.S93,v.18

- 453 **Woodward, S. W.** A business man's view of child labor. American academy of political and social science, Annals, Mar. 1906, v. 27: 361-363.
H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 103-105; Pamphlet no. 35. 3 p. HD6250.U3N2,no.20;no.35
Charities and the Commons, Mar. 3, 1906, v. 15: 800-801. HV1.C4,v.15
- 454 **Woolley, Mrs. Helen (Thompson).** Charting childhood in Cincinnati. Survey, Aug. 9, 1913, v. 30: 601-606. HV1.C4,v.30
- 455 ——— The supervision of working children under the Ohio law. (In National conference of charities and correction. Proceedings, Baltimore, 1915. Chicago, 1915. 23^{cm}. p. 526-528) HV88.A3 1915
- 456 **Worcester, Daisy Worthington.** New champions of an old evil. Pearson's magazine, July, 1914, v. 32: 53-63. AP2.P35,v.32

LEGISLATION.

STATE LEGISLATION AND ENFORCEMENT.

- 457 **Addams, Jane.** The operation of the Illinois child labor law. American academy of political and social science, Annals, Mar. 1906, v. 27: 327-330.
H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 69-72; Pamphlet no. 29. 4 p. HD6250.U3N2,no.20;no.20a;no.29
- 458 **Alabama.** Dept. for inspection of jails, almshouses, cotton mills, factories, etc. Annual report 1909. Montgomery, Ala., 1910. 23^{cm}.
HD3663.A2A3
HV8320.A17
Compulsory education: p. 9-11; Child labor laws and means of enforcement: p. 11-13.
- 459 ——— Annual report of the factory inspector, 1912. Montgomery, Ala., 1913. 144 p. 22^{1/2}cm. HD6250.U4A2
Devoted to the enforcement of the Child labor law.
- 460 **American association for labor legislation.** Child labor legislation, 1911-1915. (In American labor legislation review, Oct. 1911, v. 1: 69-86; Oct. 1912, v. 2: 456-464; Oct. 1913, v. 3: 364-378; Nov. 1914, v. 4: 451-461; Dec. 1915, v. 5: 694-721) HD7833.A55,v.1-5
- 461 **The American year book; a record of events and progress 1915.** New York and London, D. Appleton and company, 1916. 862 p. 20^{1/2}cm.
Child labor: p. 392-393; Legislation: p. 273, 442-443. E171.A585 1915
Published annually since 1910.
- 462 **Anderson, Neal L.** Child labor legislation in the South. American academy of political and social science, Annals, May, 1905, v. 25: 491-507.
H1.A4,v.25
National child labor committee. Pamphlet no. 2. p. 79-95.
HD6250.U3N2,no.2
(In Louisiana. Bureau of statistics of labor. Report. New Orleans, La. 1906. 23^{cm}. p. 26-40.) HC107.L8A2 1904-05
- 463 **Barnard, J. Lynn.** Factory legislation in Pennsylvania: its history and administration. Philadelphia, Pub. for the University, 1907. xi, 178 p. 25^{1/2}cm. (Publication of the University of Pennsylvania. Series in political economy and public law. no. 19) HD3626.U6P42
Early child labor laws, p. 18-24; Child labor campaign 1903-1905, p. 86-105; Child labor code, p. 135-163.
- 464 **Breckinridge, Sophonisba P.** Beginnings of child labor legislation. Survey, Oct. 21, 1911, v. 27: 1044-1045. HV1.C4,v.27

- 465 **Breckinridge, Sophonisba P.** Child-labor legislation. Elementary school teacher, June, 1909, v. 9: 511-516. L11.E6,v.9
- 466 **Bremer, H. M.** Iowa's gains in child labor laws and a woman's reformatory. Survey, May 8, 1915, v. 34: 145-146. HV1.C4,v.34
- 467 **Bureau of municipal research, New York.** A report on the Division of child hygiene, Department of health, with constructive suggestions. Prepared for the committee of the Board of estimate and apportionment on health, hospitals and charities inquiries, by the Bureau of municipal research, New York city. [New York, M. B. Brown printing & binding co.] 1911. 69, [6] p. incl. forms (2 fold.) 23^{cm}. RA609.B8
Employment certificates: p. 27, 42, 49-51, 71.
- 468 **Cadwallader, Starr.** The enforcement of child labor legislation. American academy of political and social science, Annals, Jan. 1907, v. 29: 132-134. H1.A4,v.29
- 469 **California child labor law sustained.** Charities and the Commons, Feb. 3, 1906, v. 15: 573-574. HV1.C4,v.15
- 470 **Campbell, Robert Argyll.** Child labor law—District of Columbia. American political science review, Feb. 1909, v. 3: 56-58. JA1.A6,v.3
- 471 ——— Labor legislation—Oklahoma. American political science review, Aug. 1909, v. 3: 404-406. JA1.A6,v.3
- 472 **Campbell, Willard A.** Pennsylvania's new child labor law. American industries, Sept. 1915, v. 16: 21-22. HD4802.A6,v.16
Editorial comment: p. 8-9.
- 473 **Carrigan, Thomas Charles.** The law & the American child. [Worcester, Mass., 1911] [121]-183 p. 24^{cm}. HV723.C2
Bibliography: p. 181-183.
Reprinted from the Pedagogical seminary, June, 1911, vol. xviii, p. 121-183. L11.P4,v.18
- 474 **Chandler, H. A. E.** With Arizona's first legislature. Survey, Aug. 17, 1912, v. 28: 647-648. HV1.C4,v.28
Child labor law, p. 648.
- 475 **Child labor.** Elementary school journal, Jan. 1915, v. 15: 232-233. L11.E6,v.15
- 476 **Child labor and legislation in Pennsylvania.** Addresses by Rudolph Blankenburg; Julia C. Lathrop; Mrs. Florence Kelley; Charles L. Chute; and Owen R. Lovejoy. City club of Philadelphia. City club bulletin, Feb. 5, 1913, v. 6: 228-240. JS1261.C47,v.6
- 477 **Child labor bills pending in twenty-seven legislatures.** Survey, Mar. 6, 1915, v. 33: 601-602. HV1.C4,v.33
- 478 **Child labor legislation.** Schedules of existing statutes and the standard child labor law, embodying the best provisions of the most effective measures now in force. Handbook 1908. Comp. by Josephine Goldmark, National consumers' league, New York city. Philadelphia, The American academy of political and social science [1908] cover-title, 68 p. 24^{cm}. (Supplement to the Annals of the American academy of political and social science. May, 1908) H1.A4,v.31
Supplement containing changes in laws, May, 1908, to August, 1909. Prepared by Josephine J. Eschenbrenner. National child labor committee, New York. Pamphlet no. 117. 16 p. HD6250.U3N2,no.117
- 479 **Chute, Charles L.** Child labor laws of Illinois unchanged. Survey, May 27, 1911, v. 26: 332-333. HV1.C4,v.26

- 480 **Chute, Charles L.** The enforcement of child labor laws. *Child labor bulletin*, Aug. 1912, v. 1: 108-113. HD6250.U3N4,v.1
- 481 ——— Uniform law for night work in Pennsylvania. *Survey*, Apr. 15, 1911, v. 26: 112-113. HV1.C4,v.26
- 482 **Clapper, Edward M.** The needs of Indiana in child labor legislation. National child labor committee. New York, 1910. Pamphlet no. 143. 11 p. HD6250.U3N2,no.143
- 483 ——— Ohio's child labor relief law. *Survey*, Mar. 26, 1916, v. 23: 961-962. HV1.C4,v.23
- 484 **Commons, John Rogers and John B. Andrews.** Principles of labor legislation. New York and London, Harper & brothers [1916] 7 p. L., 524 p. diagrs. 21^{cm}. [Harper's citizens series, ed. by W. F. Willoughby] HD7834.C65
See index under Child labor: p. 500.
- 485 **Compulsory school attendance.** Washington, Govt. print. off., 1914. 137 p. 23^{cm}. (U. S. Bureau of education. Bulletin, 1914, no. 2. Whole no. 573) L111.A6,1914,no.2
Tables showing child labor—employments prohibited, hours of labor, certificates, etc.: p. 56-77.
- 486 **Conflicting reports on child labor law of Massachusetts.** *Survey*, Jan. 24, 1914, v. 31: 483. HV1.C4,v.31
- 487 **Connecticut. Board of education.** Report of the Board of education, 1912-1913. Hartford [etc.] 1913. 587 p. 24^{cm}. L128.B14
Summary of the important features of the enforcement of the child labor law: p. 73-83.
- 488 **Construction of child labor statutes.** *Yale law journal*, Dec. 1913, v. 23: 175-179.
- 489 **Davies, Edgar T.** The enforcement of child labor legislation in Illinois. American academy of political and social science, *Annals*, Jan. 1907, v. 29: 93-103. H1.A4,v.29
National child labor committee. Pamphlet no. 54. 11 p. HD6250.U3N2,no.54
- 490 ——— and **Barney Cohen.** Proposed Illinois child labor law. (Child, Chicago, Mar. 1913, v. 2: 29-36. HQ750.A2C3,v.2
- 491 **Denson, Daisy.** The first child labor law enacted in North Carolina. *Charities*, Apr. 25, 1903, v. 10: 410-411. HV1.C4,v.10
- 492 **Dewavrin, Maurice.** La protection légale du travail des femmes et des enfants aux États-Unis. *Revue politique et parlementaire*, Oct. 10, 1910, v. 66: 102-115. H3.R4,v.66
- 493 **Downey, Ezekiel Henry.** History of labor legislation in Iowa. Iowa City, Ia., State historical society of Iowa, 1910. x p., 1 l., 283 p. 24^{cm}. (Iowa economic history series) HD7835.I6D7
Child labor legislation: p. 110-147.
Notes and references: p. 229-243.
- 494 **Edwards, Alba M.** The labor legislation of Connecticut. [New York, Pub. for the American economic association by the Macmillan company; etc., etc., 1907] viii, 322 p. 25^{cm}. (Publications of the American economic association. Third series, vol. viii, no. 3) HD7835.C8E2
HB1.A5,3d ser.v.8
Child labor, p. 1-73; Hours of labor, and the economic effects of the restrictions on child and woman labor, p. 74-99; Digest of the child labor laws of Connecticut, p. 319-323.
- 495 **Erickson, Halkord.** Child labor legislation and methods of enforcement in northern central states. American academy of political and social science, *Annals*, May, 1905, v. 25: 467-479. H1.A4,v.25
National child labor committee. Pamphlet no. 2, p. 55-67; Pamphlet no. 7, 13 p. HD6250.U3N2,no.2,no.7

- 496 **Evans, Orrena Louise.** The children's code of Ohio. American political science review, Nov. 1913, v. 7: 647-650. JA1.A6,v.7
Child labor, p. 649-650.
- 497 **Fairchild, Fred Rogers.** The factory legislation of the state of New York. London, For the American economic association by the Macmillan company; [etc., etc.] 1905. iv p., 1 l., 218 p. 24 $\frac{1}{2}$ cm. (Publications of the American economic association. 3d series, vol. vi, no. 4) HB1.A5,3d ser.v.6
Child labor, p. 100-143.
- 498 **Farnam, Henry W.** The relation of state and federal legislation to the child labor problem. (In Child labor conference. Hartford, Conn., 1908. Report of the proceedings . . . [Hartford] 1909. 22cm. p. 32-39) HD6250.U4C8 1908
- 499 **Folks, Homer.** Enforcement of child labor laws. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 91-95. H1.A4,v.35
- 500 **Fox, Hugh F.** The operation of the new child labor law in New Jersey. American academy of political and social science, Annals, May, 1906, v. 25: 522-541. H1.A4,v.25
National child labor committee. Pamphlet no. 2, p. 110-129; Pamphlet no. 15. 20 p. HD6250.U3N2,no.2;no.15
- 501 **Freeman, William.** The legal regulation of labor. Lawyer and banker, June, 1914, v. 7: 188-203. Construction of child labor statutes, p. 193-197.
- 502 **Frost, Edward W.** The operation of the Wisconsin child labor law. American academy of political and social science, Annals, Mar. 1906, v. 27: 357-360. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 99-102; Pamphlet no. 34. 4 p. HD6250.U3N2,no.20;no.34
- 503 **Gordon, Jean M.** New Louisiana child labor law. Charities and the Commons, Dec. 26, 1908, v. 21: 480-481. HV1.C4,v.21
- 504 **Guild, Curtis.** Child labor legislation in Massachusetts. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 7-12. H1.A4,v.35
National child labor committee. Pamphlet no. 129. 7 p. HD6250.U3N2,no.129
- 505 **Hall, Fred S.** Pennsylvania's child labor laws. Survey, May 29, 1909, v. 22: 321-324. HV1.C4,v.22
- 506 ——— "Poverty exceptions" in child labor laws. National child labor committee, New York, Leaflet no. 26. Mar. 1909. 15 $\frac{1}{2}$ cm. HD6250.U3N19,no.26
- 507 **Hall, George A.** New child labor legislation in New York. Survey, Oct. 25, 1913, v. 31: 89-90. HV1.C4,v.31
- 508 ——— Proper issuance of work permits. National child labor committee, New York. The child labor bulletin, May, 1914, v. 3, no. 1: 107-115. HD6250.U3N4,v.3,no.1
- 509 **Harris, Henry J.** The essentials of a child labor law for the District of Columbia. American academy of political and social science, Annals, Mar. 1906, v. 27: 364-370. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 106-112; Pamphlet no. 36. 7 p. HD6250.U3N2,no.20,no.36

- 510 **Haynes, Frederick Emory.** Child labor legislation in Iowa. Iowa City, Ia., State historical society of Iowa, 1914. 79 p. 23½^{cm}. (Iowa applied history series, ed. by B. F. Shambaugh. [vol. II, no. 10]) On cover: Reprinted from volume two of the Iowa applied history series published at Iowa City in 1914 by the State historical society of Iowa. HC107.I7A6,v.2
HD6250.U4I8 1914
- 511 **Hollis, John Porter.** Child labor legislation in the Carolinas. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 114-117. H1.A4,v.38
National child labor committee. Pamphlet no. 159. 5 p.
HD6250.U3N2,no.159
- 512 **Huber, Mrs. C. J.** Enforcing the child labor law in Florida. Charities and the Commons, Jan. 9, 1909, v. 21: 652. HV1.C4,v.21
- 513 **Kelley, Mrs. Florence.** Child labor legislation. American academy of political and social science, Annals, July, 1902, v. 20: 153-164. H1.A4,v.20
- 514 ——— Child labor legislation. (*In* La Follette, Robert Martin, ed. The making of America. Chicago, 1906. 25^{cm}. v. 8, p. 56-69) HC103.L25,v.8
- 515 ——— Child labor legislation. Case and comment, Jan. 1911, v. 17: 379-382.
- 516 ——— Child labor legislation and enforcement in New England and the Middle states. American academy of political and social science, Annals, May, 1905, v. 25: 480-490. H1.A4,v.25
National child labor committee. Pamphlet no. 2, p. 68-78.
HD6250.U3N2,no.2
- 517 ——— An effective child-labor law. American academy of political and social science, Annals, May, 1903, v. 21: 438-445. H1.A4,v.21
- 518 ——— Die gesetzliche Regelung der Kinderarbeit im Staate Illinois. Archiv für soziale Gesetzgebung und Statistik, 1898, v. 12: 530-550. H5.A8,v.12
- 519 ——— Has Illinois the best laws in the country for the protection of children? American journal of sociology, Nov. 1904, v. 10: 298-314. HM1.A7,v.10
- 520 ——— The Illinois child-labor law. American journal of sociology, Jan. 1898, v. 3: 490-501. HM1.A7,v.3
- 521 ——— Illinois child labor law. Survey, June 10, 1911, v. 26: 414. HV1.C4,v.26
- 522 ——— Laws for the children's welfare. An ideal attainable in 1920: Child labor; Compulsory education. (*In* National education association, Journal of proceedings and addresses . . . 1908. Winona, Minn. 1908. 23½^{cm}. p. 1222-1228) L13.N4 1908
- 523 ——— Obstacles to the enforcement of child labor legislation. American academy of political and social science, Annals, Jan. 1907, v. 29: 50-56. H1.A4,v.29
National child labor committee. Pamphlet no. 46. 7 p.
HD6250.U3N2,no.46
- 524 ——— On some changes in the legal status of the child since Blackstone. International review, Aug. 1882, v. 18: 83-98. AP2.I78,v.18
- 525 ——— Some ethical gains through legislation. New York, London, The Macmillan company, 1905. x, 341 p. 19^{cm}. (The citizen's library of economics, politics, and sociology, ed. by R. T. Ely) HN64.K29
"The right to childhood: Young children working in tenement houses; Young children in domestic work; Children in street occupations; Telegraph and messenger boys; Children in retail trade; Children in manufacture; The glass bottle industry;" p. 3-57; "The child, the state, and the nation:" p. 58-104.

- 526 **Kelley, Mrs. Florence.** What constitute effective child labor laws. (*In Louisiana.* Bureau of statistics of labor. Report, 1904-05. New Orleans, La. 1906. 23^{cm}. p. 40-46) HC107.L8A2 1904-5
- 527 **Kingsbury, Susan Myra, ed.** Labor laws and their enforcement, with special reference to Massachusetts, by Charles E. Persons, Mabel Parton, Mabelle Moses, and three "fellows"; ed. by Susan M. Kingsbury. New York [etc.] Longmans, Green, and co., 1911. xxii, 419 p. pl., fold. tables, fold. diagr. 23^{1/2}^{cm}. (Women's educational and industrial union, Boston. Dept. of research. Studies in economic relations of women. vol. II) HD6083.U6M2
- CONTENTS.—Preface, by E. F. Gay.—Introduction, by S. M. Kingsbury.—The early history of factory legislation in Massachusetts, by C. E. Persons.—Unregulated conditions in women's work, by Mabel Parton and Caroline Manning.—Weakness of the Massachusetts child labor laws, by Grace F. Ward.—Administration of labor legislation in the United States, with special reference to Massachusetts, by Edith Reeves and Caroline Manning.—Labor laws of Massachusetts, 1902-1910, by Edith Reeves.—The regulation of private employment agencies in the United States, by Mabelle Moses.
- See Index under Child labor and Child labor legislation.
- 528 **Lindsay, Samuel McCune.** How to make child labor legislation more effective. Child labor bulletin, May, 1913, v. 2, no. 1: 63-73. HD6250.U3N4,v.2
- National child labor committee. Pamphlet no. 197. 12 p. HD6250.U3N2,no.197
- 529 ——— When Congress acts as a state legislature. [Child labor law for the District of Columbia] Charities and the Commons, Mar. 3, 1906, v. 15: 755-757. HV1.C4,v.15
- 530 **Lindsey, Ben B.** Child labor legislation and methods of enforcement in the Western states. American academy of political and social science, Annals, May, 1905, v. 25: 508-515. H1.A4,v.25
- National child labor committee. Pamphlet no. 2, p. 96-103; Pamphlet no. 6. 8 p. HD6250.U3N2,no.2;no.6
- 531 **Loos, Isaac A.** Child labor legislation in Iowa. Iowa journal of history and politics, Oct. 1905, v. 3: 582-582. F616.I5,v.3
- 532 **Lovejoy, Owen R.** Better child labor laws in 1911. New York, 1911. 8 p. tab. 23^{cm}. (National child labor committee. Pamphlet no. 167) HD6250.U3N2,no.167
- 533 ——— Child labor laws not drastic. Independent, June 26, 1913, v. 74: 1444-1445. AP2.I53,v.74
- "Protest to an editorial on the Florida child labor bill."
- 534 ——— The duty of superintendents in the enforcement of child labor laws (*In* National education association. Journal of proceedings and addresses, 1912. Ann Arbor, Mich. 1912. 24^{cm}. p. 401-408) L13.N4 1912
- 535 ——— The employment certificate the keynote of child labor reform. Woman's home companion, Nov. 1906, v. 33: 16, 74-75. AP2.W714,v.33
- 536 ——— Legislation advocated by the National child labor committee. (*In* Child labor conference. Hartford, Conn., 1908. Report of the proceedings . . . [Hartford] 1909. 22^{cm}. p. 18-21) HD6250.U4C8 1908
- 537 ——— The test of effective child-labor legislation. American academy of political and social science, Annals, May, 1905, v. 25: 459-466. H1.A4,v.25
- National child labor committee. Pamphlet, no. 2, p. 47-54; no. 5. 8 p. HD6250.U3N2,no.2;no.5

- 538 **McDowell, James B.** The difficulties of child labor legislation in a southern state [Mississippi]. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 166-171. H1.A4,v.33
National child labor committee. Pamphlet no. 109. 6 p.
HD6250.U3N2,no.109
- 539 **McKelway, A. J.** Arkansas child labor law secured by the initiative. Survey Oct. 10, 1914, v. 33: 44. HV1.C4,v.33
- 540 ——— The child and the law. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 63-72. H1.A4,v.33
National child labor committee. Pamphlet no. 110. 10 p.
HD6250.U3N2,no.110
- 541 ——— Child labor and child labor legislation in the South. (In National conference of charities and correction. Proceedings, Baltimore, 1915. Chicago, 1915. 23^{cm}. p. 514-518.) HV88.A3 1915
- 542 ——— Standards of legislation for women and children in the southern states. (In National conference of charities and correction. Proceedings, 1911. Fort Wayne, 1911. 23^{cm}. p. 186-190) HV88.A3 1911
- 543 **Maryland. Bureau of statistics and information.** 23d-24th annual report . . . 1914-1915. Baltimore, 1915-16. 2 v. 23^{cm}. HC107.M3A15 1914, 15
1914: Issuance of employment certificates: p. 9-47. Issuance of employment certificates in the counties: p. 139-161.
1915: Contribution of children of Baltimore to world's work of 1915, p. 40-75: Issuance of employment certificates in counties other than western Maryland, p. 180-191.
- 544 **Massachusetts. State board of labor and industries.** Brief on the laws relating to employment of women and children. Boston, 1914. 4 p.
- 545 ——— Bulletin no. 1-3. August, 1913-November, 1913. Boston, 1913. 3 v. 23^{cm}.
CONTENTS.—1. Laws relating to the employment of women and children; with a summary for the information of employers of labor. 63 p.—2. Laws relating to school attendance and the employment of minors; with an explanation for the use of school authorities. 49 p.—3. Laws relating to labor enforced by the State board of labor and industries. 1913. 104 p.
- 546 ——— Report on the effect of the child labor law of 1913 to the State board of labor and industries. March 27, 1914. Boston, Wright & Potter printing co., state printers, 1914. 94 p. 23^{cm}. ([General court, 1914] House. [Doc.] 2552) HD6250.U4M48 1914
The report of an investigation made under the supervision of Mr. Robert A. Woods, of Boston by direction of the State board of labor and industries, and issued as a supplement to its annual report.
- 547 **The Massachusetts child labor law.** Textile world record, Sept. 1913, v. 45: 65. TS1300.T36,v.45
- 548 **Mending the Maryland child labor law.** Survey, Apr. 25, 1914, v. 32: 87. HV1.C4,v.32
- 549 **Minor, Jeanie V.** Proof-of-age records. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 127-129. H1.A4,v.35
- 550 **Morgan, J. H.** The child labor laws of the Ohio valley. American academy of political and social science, Annals, Jan. 1907, v. 29: 61-70. H1.A4,v.29
National child labor committee. Pamphlet no. 48. 10 p.
HD6250.U3N2,no.48
- 551 **Morrison, Henry C.** Enforcement of child labor laws in New Hampshire. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 103-110. H1.A4,v.35

- 552 **National child labor committee, New York.** Child labor laws in all states. New York, National child labor committee [1912] cover-title, 3 l., 124 p. 22½^{cm}. (The child labor bulletin, v. 1, no. 2) HD6250.U3N4
HD6243.U5N3
CONTENTS.—Summary of state laws.—The uniform child labor law.—The enforcement of child labor laws [by] Charles L. Chute.—Street trades and their regulation: a symposium [by] Edward N. Clopper, Zenas L. Potter, Lillian A. Quinn.
For later compilation see no. 571 in this list.
- 553 ——— More protection for working children. Child labor bulletin, Nov. 1913, v. 2, no. 3. 72 p. HD6250.U3N4,v.2,no.3
Summary of laws enacted in 1913, supplements issue of bulletin for Aug. 1912.
- 554 **New child labor law for Pennsylvania.** Survey, May 15, 1915, v. 34: 149. HV1.C4,v.34
- 555 **New Hampshire. Children's commission.** Report of the Children's commission to the governor and legislature, January, 1915. Concord, N. H. [Printed by J. B. Clarke co., Manchester] 1914. 136 p. 22½^{cm}. HV742.N4A5 1914
Child labor conditions: p. 43; Digest of child labor laws: p. 127-129.
- 556 **New York (City) Bureau of child hygiene.** The Bureau of child hygiene of the Department of health of the city of New York, by S. Josephine Baker . . . 3d ed., rev. and enl. [New York] 1915. 160 p. 23^{cm}. (Dept. of health of the city of New York. Monograph series. no. 4, Jan. 1915)
Issuance of employment certificates: p. 147-157. RA122.N585,no.4
- 557 **New York (State) Bureau of factory inspection.** Children's employment certificates issued by local boards of health. (*In its* Annual report, 1908, p. 134-143; 1909, p. 164-173; 1910, p. 172-181; 1911, p. 224-235) HC107.N7A2
- 558 ——— Department of labor. Bureau of inspection. Number of children's employment certificates issued by Boards of health in first and second class cities. New York. Dept. of labor. Bulletin, Sept. 1913, v. 15: 458. HC107.N7A5
- 559 **Nicholes, Anna E.** From school to work in Chicago; a study of the central office that grants labor certificates. Charities and the Commons, May 12, 1906, v. 16: 231-235. HV1.C4,v.16
- 560 **Ogburn, William Fielding.** Progress and uniformity in child-labor legislation; a study in statistical measurement. New York, Columbia university; [etc., etc.] 1912. 219 p. incl. tables, diagrs. 25^{cm}. (Studies in history, economics, and public law, ed. by the Faculty of political science of Columbia university, vol. XLVIII, no. 2, whole no. 121) H31.C7,v.48,no.2
HD6243.U505
"A description of the child-labor laws of the United States during the past third of a century."
- 561 **Ohio. Industrial commission.** Schooling certificates and the employment of minors. (*In its* Bulletin, Dec. 1, 1913, v. 1, p. 4-5) HD8053.O3A4
- 562 **Pennsylvania. Bureau of vocational education.** A digest of the decisions of the attorney general interpreting the child labor act of 1915, and directions for the issuance of employment certificates. Harrisburg, Pa., 1916. 16 p. 23^{cm}. (Bulletin 6)
- 563 ——— The Pennsylvania child labor act and continuation schools. Harrisburg, Pa., 1915. 26 p. 23^{cm}. (Bulletin 5)
- 564 **Pennsylvania child labor association.** [Pamphlets] Philadelphia, 1912-1913. 5 v. 15½-23^{cm}.
Pennsylvania's problem; A proposed child labor law; Outline of the Walnut child labor bill; On the firing line; Some facts relating to the child labor bill. 1913.

- 565 **Rosselle, Edward M.** Legislation proposed by the labor unions. (*In* Child labor conference. Hartford, Conn., 1908. Report of the proceedings . . . [Hartford] 1909. 22^{cm}. p. 21-23.) HD6250.U4C8 1908
- 566 **Scott, Laura.** Summary of laws in force 1910; child labor. New York, 1910. 139 p. 23^{cm}. (Legislative review no. 5. American association for labor legislation) HD7833.A5
- 567 **Sheets, Nellie F.** Notes on current legislation: Child labor: Mississippi and Kentucky. American political science review, Nov. 1908, v. 2: 569-571. JA1.A6,v.2
- 568 **Stimson, Frederic Jesup.** Handbook to the labor law of the United States. New York, C. Scribner's sons, 1896. 2 p. l., [vii]-xxii, (2), 385 p. 19^{cm}. Treats of laws regulating child labor in the various states. HD7834.S8
- 569 ——— Popular law-making; a study of the origin, history, and present tendencies of law-making by statute. New York, C. Scribner's sons, 1911. xii p., 11., 390 p. 22½^{cm}. JF432.U688 1911
Child labor, p. 221-226.
- 570 **Swift, W. H.** Why it is hard to get good child labor laws in the South. New York city, National child labor committee [1914?] 6 p. 23^{cm}. (National child labor committee. Pamphlet no. 235) Reprinted from the Child labor bulletin, v. 3, no. 1, May 1914. HD6250.U3N4,v.3
- 571 **Taylor, Florence I.** comp. Child labor laws in all the states. Comp. by Florence I. Taylor, July, 1915. New York, National child labor committee, 1915. 64 p. 23^{cm}. (Pamphlet no. 249)
- 572 **U. S. Bureau of labor.** Report on condition of woman and child wage-earners in the United States. v. 6. The beginnings of child labor legislation in certain states; a comparative study. By Elizabeth Lewis Otey. Washington, Govt. print. off., 1910. 225 p. 23^{cm}. (61st Cong. 2d sess. Senate. Doc. 645. v. 6) HD6093.A4,v.6
CONTENTS.—Employment of children in the colonies; Public opinion and child labor in the nineteenth century; Children in the cotton industry; a historical sketch; Child labor legislation prior to 1860; Introduction; Massachusetts; Rhode Island; Connecticut; Vermont; New Hampshire; Maine; New York; New Jersey; Pennsylvania; Delaware; Maryland, and Ohio; Child labor legislation in four Southern states: North Carolina, South Carolina, Georgia, Alabama; Conclusion.
- 573 ——— v. 19. Labor laws and factory conditions. Washington, Govt. print. off., 1912. 1125 p. 23^{cm}. (61st Cong. 2d sess. Senate. Doc. 645. v. 19.) HD6093.A4,v.19
- 574 ——— **Bureau of labor statistics.** Decisions of courts affecting labor. 1912, 1913, 1914, 1915. Washington, Govt. print. off., 1913-1916. 4 v. 23^{cm}. (*Its* Bulletin no. 112, 152, 169, 189.) IID8051.A62
See Indexes for decisions relating to the employment of children.
- 575 ——— **Labor laws of the United States, with decisions of courts relating thereto.** Washington, Govt. print. off., 1914. 2 v. (*Its* Bulletin no. 148) HD7833.A4 1914
See Index, v. 2, p. 2450-2453 for laws relating to employment of children in various trades, age limit, certificates, night work, hours of labor, etc. etc.
Labor legislation of 1914. 1915. 290 p. (*Its* Bulletin, no. 166)
Labor legislation of 1915. 1916. 494 p. (*Its* Bulletin, no. 186)
- 576 ——— **Children's bureau.** Administration of child labor laws. Pt. 1. Washington, Govt. print. off., 1915. 69 p. fold. diagrs., forms. 24½^{cm}. (Industrial series, no. 2. Bureau publication, no. 12.) HD6250.U3A4 1915a
HV741.A32
Pt. 1. Employment certificate system, Connecticut, by Helen L. Sumner and Ethel E. Hanks.
Pt. 2. Employment certificate system, New York, by Helen L. Sumner and Ethel E. Hanks.
In press.—Reports on Maryland, Massachusetts, Ohio, and Wisconsin, in progress.

- 577 **U. S. Children's bureau.** Child labor legislation in the United States, by Helen L. Sumner and Ella A. Merritt. Washington, Govt. print. off., 1915. 1131 p. tables (part fold.) 24 $\frac{1}{2}$ "cm. (Industrial series, no. 1. Bureau publication, no. 10) HD6243.U5A4 1915
HV741.A32,no.10
"Analytical tables": p. 27-475.
"Text of laws" [of the several states and territories, the District of Columbia, the Philippine Islands and Porto Rico]: p. 477-1106.
Separates, numbered 1 to 54, have also been issued, as reprints. No. 1 contains the "Analytical tables" and no. 2-54 contain the laws of the several states, etc., arranged alphabetically: no. 2, Alabama; no. 3, Alaska; No. 10, District of Columbia, etc., etc.,
- 578 **Congress. House. Committee on the District of Columbia.** Child labor in the District of Columbia. Report. Apr. 6, 1906. [Washington, Govt. print. off., 1906.] 5 p. 23 $\frac{1}{2}$ "cm. (59th Cong. 1st sess. House. Rept. 2949.) Ser. no. 4907
- 579 **Employment of child labor in the District of Columbia . . .** Report. [To accompany H. R. 16063] [Washington, Govt. print. off., 1908] 8 p. 23"cm. (60th Cong., 1st sess. House. Rept. 1524)
HD6243.U5A4 1908
- 580 **Report of hearings of March 13 and 16, 1906, on S. 1243, providing for compulsory education in the District of Columbia; and H. R. 375 and 5974, to regulate child labor in the District of Columbia . . .** Washington, Govt. print. off., 1906. 62 p. 23"cm. LC132.D6A3
- 581 **Laws, statutes, etc.** 59th Cong. 1st sess. H. R. 17838. A bill to regulate the employment of child labor in the District of Columbia. Apr. 6, 1906. 7 p. 23 $\frac{1}{2}$ "cm.
- 582 **Valesh, Eva McDonald.** Child labor. American federationist, Mar. 1907, v. 14: 157-173. HD8055.A5A2,v.14
Abstract of state laws, p. 158-161.
- 583 **Child labor legislation.** American federationist, Aug. 1909, v. 16: 672-675. HD8055.A5A2,v.16
- 584 **Van der Vaart, Harriet.** Has the Illinois child labor law brought distress? Charities, Sept. 5, 1903, v. 11: 191-192. HV1.C4,v.11
- 585 **Watson, E. J.** Enforcement of child labor laws in South Carolina. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 96-102. H1.A4,v.35
- 586 **White, Sophie D.** Court decisions affecting child labor: 1902-1914. Child labor bulletin, Feb. 1916, v. 4, no. 4: 207-212. HD6250.U3N4,v.4,no.4
- 587 **Whitin, Ernest Stagg.** Factory legislation in Maine. New York, Columbia university, Longmans, Green & co., agents; [etc., etc.] 1908. 145 p. 25"cm. (Studies in history, economics, and public law, ed. by the Faculty of political science of Columbia university, vol. XXXIII, no. 1) HD7835.M2W5
H31.C7,v.33,no.1
Early child labor laws, 1847-1855, p. 26-46.
Expansion of factory legislation, 1887-1903: Employment of children, p. 85-101.
Child labor campaign, 1905-1907, p. 102-122.
Administration and the factory law, 1908: Child labor, p. 130-138. Street trades, p. 137-138.
- 588 **Whittelsey, Sarah Scovill.** Massachusetts labor legislation; an historical and critical study . . . with an introduction by A. T. Hadley. [Philadelphia, American academy of political & social science, 1900] 157 p. table. 24 $\frac{1}{2}$ "cm. HD7835.M4W6
American academy of political and social science, Annals, Supplement, Jan. 1901.
Bibliography: p. 145-157.
Early child labor laws, 1867, p. 9-12; Later child labor laws, 1876-1890, p. 16-21, 66-67, 83-85;
"Digest of the labor laws of Massachusetts: I. Regulation of child labor," p. 113; II. "Hours of labor of women and children," p. 113-116.

- 589 **Williamson, Emily E.** Child labor legislation. American academy of political and social science, Annals, May, 1903, v. 21: 446-451. H1.A4,v.21
A synopsis of a report to the National conference of charities and correction held at Atlanta, May 6-13, 1903, arranged by states.
- 590 **Woolley, Mrs. Helen Bradford (Thompson).** The issuing of working permits and its bearing on other school problems. [n. p., 1915] 7 p. 27^{cm}.
"Reprinted from School and society, v. 1, no. 21, p. 726-733, May 22, 1915".

UNIFORM LEGISLATION.

- 591 **Conference of commissioners on uniform state laws. Proceedings.** Danbury, Conn. [etc.] 1910-1913. 4 v. 22^{1/2}^{cm}. JK2439.A3
1910: Report of the Special committee on a uniform child labor law: p. 190-214.
1911: Second report: p. 175-176.
1913: Committee continued: p. 58.
- 592 ——— The uniform child labor law as approved and recommended by the Conference of commissioners on uniform state laws. 4th ed. rev. Feb., 1912. New York, 1912. 24 p. 23^{cm}.
- 593 ——— **Special committee on a uniform child labor law.** Report of the Special committee on a uniform child labor law. Boston, Wright & Potter printing co., state printers, 1910. 30 p. 23^{1/2}^{cm}. HD6250.U3C6
Hollis R. Bailey, chairman.
Submitted "to the Commissioners on uniform state laws in twentieth national conference."
Also printed in American bar association. Report, 1910, p. 1154-1178.
- 594 **Kelley, Mrs. Florence.** What should we sacrifice to uniformity? American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 24-30. H1.A4,v.38
National child labor committee. Pamphlet no. 160. 8 p.
HD6250.U3N2,no.160
- 595 **Kendall, Henry P.** The effect of uniform labor standards on interstate competition. Child labor bulletin, May, 1915, v. 4: 27-35. HD6250.U3N4,v.4
- 596 **Lindsay, Samuel McCune.** Unequal laws an impediment to child labor legislation. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 16-22. H1.A4,v.35
- 597 **Lovejoy, Owen R.** Uniform child labor laws. 2d ed., rev. to Aug. 1911. New York, 1911. 24 p. 23^{cm}. (National child labor committee. Pamphlet no. 147) HD6250.U3N2,no.147
- 598 **Massachusetts. Commissioners for promotion of uniformity of legislation in the United States.** Annual report. Boston, 1910-1913. 5 v. 23^{cm}. JK2430.M4
1st report, 1909: Child labor law: p. 9.
2d report, 1910: Report of the Special committee on a uniform child labor law: p. 13-38.
3d report, 1911: Uniform child labor law: p. 4.
4th report, 1912: Uniform child labor law: p. 3-4.
5th report, 1913: Uniform child labor law: p. 3-4.
- 599 **Stovall, A. T.** Standards proposed by United States commission on uniform laws. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 17-23. H1.A4,v.38
- 600 **Uniform child labor law; an act to regulate the employment of children and to make uniform the laws relating thereto.** Child labor bulletin, Aug. 1912, v. 1, no. 2, p. 80-107. HD6250.U3N4,v.1

FEDERAL CONTROL.

- 601 **Beveridge, Albert J.** Child labor and the nation. American academy of political and social science, Annals, Jan. 1907, v. 29: 115-124. H1.A4,v.29
National child labor committee. Pamphlet no. 55. 10 p.
HD6250.U3N2,no.55

- 602 **Beveridge, Albert J.** Child labor and the constitution. (*In* National conference of charities and correction, Proceedings. Minneapolis, 1907. p. 188-196) HV88.A3 1907
- 603 ——— Employment of child labor. Speech in the Senate of the United States, January 23, 28, and 29, 1907. Washington, 1907. 170 p. 23^{cm}. HD6250.U3B5
Also printed in his "The meaning of the times, and other speeches," Indianapolis, 1908, p. 308-367. H35.B5
- 604 ——— The need of a national child labor law. *Woman's home companion*, Feb. 1907, v. 34: 17-18. AP2.W714,v.34
- 605 ——— The position of child labor legislation. *Independent*, Feb. 21, 1907, v. 62: 434-436. AP2.I53,v.62
- 606 **Borah, William E.** The state and the nation in child labor regulation. *American academy of political and social science, Annals, Supplement*, July, 1911, v. 38: 154-155. H1.A4,v.38
- 607 **Brinton, Jasper Yeates.** The constitutionality of a federal child labor law. *University of Pennsylvania law review and American law register*, May, 1914, v. 62: 487-503.
- 608 **Bruce, Andrew Alexander.** The Beveridge child labor bill and the United States as parens patriæ. *Michigan law review*, June, 1907, v. 5: 627-638.
- 609 **Bryan, William Jennings.** The child labor bill. [Editorial] *Commoner*, Dec. 1906, v. 6: 2.
- 610 **Child, Richard Washburn.** Child-toil and the Constitution. *Ridgway's*, Dec. 22, 1906, v. 1: 35. AP2.R557,v.1
- 611 **Child labor and the federal government.** *Outlook*, Jan. 13, 1915, v. 109: 56. AP2.O8,v.109
- 612 **The Children's chance before Congress.** *Survey*, Jan. 16, 1915, v. 33: 413-415. HV1.C4,v.33
- 613 **Emery, James A.** Argument in opposition to form and validity of H. R. 8234, commonly known as Keating child labor bill, interstate commerce in products of child labor [hearing before Senate Committee on interstate commerce] Feb. 21, 1916. [Washington, Govt. print. off., 1916] 41 p. 23^{cm}. HD6250.U2A4 1916
Found also in the Hearings: p. 241-282.
- 614 **Farnam, Henry W.** The relation of state and federal legislation to the child labor problem. (*In* Child labor conference. Hartford, Conn. 1908. Report of the proceedings [Hartford] 1909. 22^{cm}. p. 32-39) HD6250.U4C8 1908
- 615 **Federal child labor bill passes the House.** *Survey*, Feb. 27, 1915, v. 33: 569. HV1.C4,v.33
- 616 **Federal control over "anti-social labor."** *Survey*, Aug. 16, 1913, v. 30: 615-616. HV1.C4,v.30
- 617 **Federal power and child labor.** *Nation*, Feb. 12, 1914, v. 98: 150-151. AP2.N2,v.98
- 618 **Kelley, Mrs. Florence.** The federal government and the working children. *American academy of political and social science, Annals*, Mar. 1906, v. 27: 289-292. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 31-34; Pamphlet no. 26. 4 p. HD6250.U3N2,no.20;no.26
- 619 ——— Responsibility of the federal government. *Child labor bulletin*, Aug. 1915, v. 4, no. 2: 107-110. HD6250.U3N4,v.4,no.2

- 620 **Kitchin, William Walton.** Child labor bill. Statement before the Committee on labor, House of representatives, 64th Cong., 1st sess. on H. R. 8234. Washington, Govt. print. off., 1916. 20 p. 23^{cm}. HD6250.U3A4 1916a
Found also in the Hearings: p. 120-157.
- 621 **Lewis, William D.** Child labor and interstate commerce. Survey, Apr. 4, 1914, v. 32: 35-37. HV1.C4,v.32
- 622 ——— The federal power to regulate child labor in the light of Supreme Court decisions. University of Pennsylvania law review and American law register, May, 1914, v. 62: 504-508.
- 623 **Lindsay, Samuel McCune.** The national remedy for child labor. Woman's home companion, Apr. 1907, v. 34: 28. AP2.W714,v.34
- 624 ——— Why a national crusade against child labor? Woman's home companion, Sept. 1906, v. 33:8, 49. AP2.W714,v.33
- 625 **Lovejoy, Owen R.** Federal government and child labor, and memorandum on the Palmer child labor bill. Child labor bulletin, Feb. 1914, v. 2, no. 4: 19-34. HD6250.U3N4,v.2
- 626 ——— The federal government and child labor. A brief for the Palmer-Owen child labor bill. New York, National child labor committee, 1914. 23 p. 23^{cm}. (Pamphlet no. 216) HD6250.U3N2,no.216
- 627 **MacCheaney, Nathan William.** Constitutionality of the federal child labor law. Child labor bulletin, Nov. 1915, v. 4, no. 3: 155-163. HD6250.U3N4,v.4,no.3
Cases cited in footnotes.
- 628 **McKelway, A. J.** The evil of child labor: why the South should favor a national law. Outlook, Feb. 16, 1907, v. 85: 360-364. AP2.O8,v.85
- 629 ——— Why the South should favor a national child labor law. Woman's home companion, Apr. 1907, v. 34: 28. AP2.W714,v.34
- 630 **Maxey, Edwin.** The constitutionality of the Beveridge child labor bill. Green bag, May, 1907, v. 19: 290-292.
- 631 **Murphy, Edgar Gardner.** Child labor as a national problem, with especial reference to the southern states. (In National conference of charities and correction. Proceedings, 1903. [Columbus, O.], 1903. 23^{cm}. p. 121-134) HV88.A3 1903
- 632 ——— The federal regulation of child labor, a criticism of the policy represented in the Beveridge-Parsons bill. [New Haven? Conn., Tuttle press? 1907] 38 p. 20 $\frac{1}{2}$ ^{cm}. HD6243.U5M8
In part, a reprint of an article written for the Evening post, of New York city, and published March 9th, 1907 . . . An earlier criticism had appeared in the Advertiser of Montgomery, Alabama, under date of Jan. 13th . . . In the present publication . . . the more important sections of both statements . . . have been preserved, certain passages have been rewritten, and a number of new paragraphs have been introduced.
- 633 **National child labor committee, New York.** The Federal child labor bill; program of tenth annual conference on child labor, New Orleans, La., March 15-18, 1914, with a copy of the federal child labor bill and a memorandum on its constitutionality. New York city, National child labor committee, 1914. 79 p. illus., col. diagr. 23^{cm}. (The child labor bulletin, v. 2, no. 4) HD6250.U3N4,v.2
CONTENTS.—Editorial notes.—Program of tenth annual conference on child labor.—Federal government and child labor, and memorandum on the Palmer child labor bill [by] O. R. Lovejoy.—Ten years of child labor reform in the South [by] A. J. McKelway.—The eight-hour day [by] Anna Rochester.—The majesty of the law in Mississippi [by] E. N. Clopper.—Present conditions in the South [by] L. W. Hine.—Strawberry pickers of Maryland [by] H. M. Bremer.—The work of England's certifying surgeons [by] H. H. Jones.

- 634 National child labor committee, New York.** Supporters of the Keating-Owen bill. New York city, 1916. 7 p. 23^{cm}. (*Its Pamphlet no. 256, Jan. 1916*) HD6250.U3N2,no.256
- 635 ———** What the newspapers say about the Keating-Owen bill. New York city, 1916. 4 p. 23^{cm}. (*Its Pamphlet no. 258, Jan. 1916*) HD6250.U3N2,no.258
- 636 ———** Why you should support the Palmer-Owen bill. Pamphlet no. 240. Jan. 1915. 4 p. HD6250.U3N2,no.240
- 637 Palmer-Owen child labor bill.** Outlook, Oct. 10, 1914, v. 108: 8. AP2.O8,v.108
- 638 Parkinson, Thomas I.** A brief for the Keating-Owen bill. Child labor bulletin, Feb. 1916, v. 4, no. 4: 219-265. HD6250.U3N4,v.4,no.4
- 639 ———** Constitutionality of a federal child labor law . . . [by] Thomas I. Parkinson . . . and Nathan W. MacChesney. New York city, National child labor committee, 1916. 20 p. 23^{cm}. (*Its Pamphlet no. 250, Jan. 1916*) Reprinted from Child labor bulletin, v. 4, no. 1, May 1915, and v. 4, no. 3, Nov. 1915. HD6250.U3N2,no.250
- 640 ———** Constitutionality of Keating-Owen child labor bill. Statement . . . delivered before House Committee on labor, Jan. 13, 1916. Washington, Govt. print. off., 1916. 27 p. 23^{cm}. HD6250.U3A4 1916b
Found also in Hearings, p. 176-201.
- 641 ———** Constitutionality of the Keating-Owen child-labor bill. A brief in support of the constitutionality of the bill. Congressional record, 64th Cong., 1st sess., v. 53, no. 33 (current file): 2058-2066.
- 642 ———** Interstate commerce in products of child labor. [Statement before Senate Committee on interstate commerce] Feb. 17, 1916. [Washington, Govt. print. off., 1916] 18 p. 23^{cm}
Found also in the Hearings: p. 113-130.
- 643 ———** Precedents for federal child labor legislation. Child labor bulletin, May, 1915, v. 4: 72-82. HD6250.U3N4,v.4
- 644 Pierce, Franklin.** Federal usurpation. New York, D. Appleton and company, 1908. xx, 437 p. 21^{cm}. JK311.P5
"This book is a plea for the sacredness of the Constitution of the United States."
Unconstitutionality of federal control of child labor: p. 289-291.
- 645 Rochester, A.** The consumer and the federal child labor law. Survey, July 18, 1914, v. 32: 412-413. HV1.C4,v.32
- 646 Survey [Editorial].** Progress of the federal child labor bill. Survey, Sept. 19, 1914, v. 32: 606. HV1.C4,v.32
- 647 To prohibit interstate trade in child labor.** Survey, Feb. 7, 1914, v. 31: 539. HV1.C4,v.31
- 648 Troutman, Robert B.** Constitutionality of a federal child labor law. Green bag, Apr., 1914, v. 26: 154-160
An argument in favor of the constitutionality of a federal child labor law.
- 649 U. S. Congress. House. Committee on labor.** Child labor bill. Hearings before the Committee on labor, House of representatives, Sixty-third Congress, second session, on H. R. 12292, a bill to prevent interstate commerce in the products of child labor, and for other purposes. February 27 [and March 9] 1914. Washington, Govt. print. off., 1914. 9, ii, 11-83 p. 23^{cm}. IID6250.U3A4 1914
David J. Lewis, chairman.
February 27 and March 9 [also May 22] 1914. Washington, Govt. print. off., 1914. 83, ii, 85-147 p. 23^{cm}. HD6250.U3A4 1914a

- 650 **U. S. Congress. House. Committee on labor.** Child-labor bill. Report. <To accompany H. R. 12292.> Feb. 13, 1915. [Washington, Govt. print. off., 1915.] 50 p. 23½^{cm}. (63d Cong. 3d sess. House. Rept. 1400.)
HD6250.U3A4 1914c
Appendix: Statements of Mrs. Florence Kelley, Julia C. Lathrop, Arthur Reed Perry, and A. J. McKelway; The eight-hour day for children, by Anna Rochester; The operation of the eight-hour law for children in Massachusetts, by Richard K. Conant; Medical opinions upon eight-hour day; Constitutionality of Palmer bill, by Jasper Y. Brinton; The federal power to regulate child labor in the light of Supreme court decisions, by William Draper Lewis; Constitutionality of a federal child labor law, by Owen R. Lovejoy.
- 651 ————— Report amending by substitute H. R. 12292, to prevent interstate commerce in products of child labor. Aug. 13, 1914. [Washington, Govt. print. off., 1914.] 2 p. 23^{cm}. (63d Cong. 2d sess. House. Rept. 1085.)
- 652 ————— Child labor bill. Hearings . . . on H. R. 8234, a bill to prevent interstate commerce in the products of child labor and for other purposes. Jan. 10, 11, and 12, 1916. Washington, Govt. print. off., 1916. 317 p. 23½^{cm}.
HD6250.U3A4 1916
Child labor laws in all the states: p. 208-234.
- 653 ————— To prevent interstate commerce in the products of child labor. Report. Jan. 17, 1916. To accompany H. R. 8234. [Washington, Govt. print. off., 1916.] 41 p. 23½^{cm}. (64th Cong. 1st sess. House. Rept. 46.)
HD6250.U3A4 1916c, pt. 1
Same. Views of the minority. Jan. 24, 1916. [Washington, Govt. print. off., 1916.] 14 p. 23½^{cm}. (64th Cong. 1st sess. House. Rept. 46, pt. 2.)
HD6250.U3A4 1916c, pt. 2
The appendix to pt. 1, p. 17-41, contains statements by A. J. McKelway, Mrs. Florence Kelley, Julia C. Lathrop; The eight-hour day for children, by Anna Rochester; The operation of the eight-hour law for children in Massachusetts, by Richard K. Conant; Medical opinions upon eight-hour day; Summary of investigations made by Penn. Child labor assoc.; Constitutionality of Keating bill, by Jasper Y. Brinton; The Federal power to regulate child labor in the light of Supreme court decisions, by William Draper Lewis.
The views of the minority deal mostly with the constitutionality of the bill.
- 654 ————— **Committee on the judiciary.** Jurisdiction and authority of Congress over the subject of woman and child labor. Report. <To accompany H. res. no. 807> [Washington, Govt. print. off.] 1907. 8 p. 23^{cm}. (59th Cong., 2d sess. House. Rept. no. 7304)
- 655 ————— **Senate. Committee on interstate commerce.** Interstate commerce in products of child labor. Report. <To accompany H. R. 12292> [Washington, Govt. print. off., 1915] 2 p. 24½^{cm}. (63d Cong., 3d sess. Senate. Rept. 1050)
HD6250.U3A4 1915
- 656 ————— Interstate commerce in products of child labor. Hearings before the Committee on interstate commerce, U. S. Senate, Sixty-fourth Congress, first session, on H. R. 8234, an act to prevent interstate commerce in the products of child labor, and for other purposes. Washington, Govt. print. off., 1916. 290, ii, 291-319 p. 23^{cm}.
HD6250.U3A41916g
- 657 ————— To prevent interstate commerce in the products of child labor. Report. <To accompany H. R. 8234> [Washington, Govt. print. off., 1916] 23 p. 23^{cm}. (64th Cong., 1st sess. Senate. Rept. 358)
Submitted by Mr. Robinson. Ordered printed April 19, 1916. HD6250.U3A41916d
- 658 ————— **Laws, statutes, etc.** 63d Cong., 3d sess. H. R. 12292. An act to prevent interstate commerce in the products of child labor, and for other purposes. Feb. 19 (calendar day, March 1) 1915. 4 p. J301913-15,v.33
- 659 ————— 64th Cong. 1st sess. H. R. 8234. A bill to prevent interstate commerce in the products of child labor, and for other purposes. Introduced in the House of representatives, Jan. 7, 1916, by Mr. Keating. 5 p. 27½^{cm}.

- 660 **Villard, O. G.** The federal child labor bill. Nation, Jan. 31, 1907, v. 84: 98.
AP2.N2,v.84

Speeches in Congress as printed in the Congressional Record.

59TH CONG., 1ST SESS. VOL. 40.

- 661 **U. S. Congress. House.** Child labor in the District of Columbia. Debate in the House, Apr. 9, 1906. pt. 5: 4967-4971.
Messrs. Morrell, Fitzgerald, Tawney, Madden, and Crumpacker.
- 662 ——— **Senate.** Child labor in the District of Columbia. Debate in the Senate, June 6, 1906. pt. 8: 7914-7915.
Senators Dubois, Hale, Lodge, Scott, and Tillman.

59TH CONG., 2D SESS. VOL. 41.

- 663 **Bacon, Augustus O.** Remarks in the Senate, Feb. 4, 1907, on employment of child labor. pt. 3: 2214-2216.
Contains text of the Georgia law.
- 664 **Beveridge, Albert J.** Speeches in the Senate, Jan. 23, 28, 29, 1907, on employment of child labor in the District of Columbia. pt. 2: 1552-1557, 1792-1826, 1867-1883.
- 665 **Crumpacker, Edgar D.** Woman and child workers in the United States. Speech in the House of representatives, Jan. 21, 1907. pt. 2, p. 1458-1460, 1461, 1473.
- 666 **Gardner, Augustus P.** Woman and child workers in the United States. Speech in the House of representatives, Jan. 21, 1907. pt. 2, p. 1462-1463.

60TH CONG., 1ST SESS. VOL. 42.

- 667 **Fulton, Charles W.** Employment of child labor. Speech in the Senate May 6, 1908. Appendix, p. 474-475.
- 668 **U. S. Congress. House.** Child labor in District of Columbia. May 9, 1908, pt. 6: 6030-6035.
Text of bill.
- 669 ——— **Senate.** Employment of child labor [in the District of Columbia] May 6, 1908. pt. 6: 5785-5802.
- 670 ——— ——— Employment of child labor in the District of Columbia. Debate in Senate, May 21, 1908. pt. 7: 6982-6985.
- 671 ——— ——— Conference report on child-labor law. May 22, 1908. pt. 8: 7077-7078.

63D CONG., 2D SESS., VOL. 51.

- 672 **Rogers, John Jacobs.** Out-Heroding Herod. Extension of remarks in the House, Sept. 29, 1914. Appendix: 1046-1054.
Gives a summary of the legislation enacted in the various states.
- 673 **U. S. Congress. House.** Debate in the House, Mar. 18, 1914, on an amendment relating to child labor to bill H. R. 14330, relating to convict-made goods. pt. 5: 5055-5066.
Messrs. Kelley (Mich.), Bartlett, Mann, McLaughlin, Howard, Fordney, Madden, and others.

63D CONG., 3D SESS., VOL. 52.

- 674 **Clark, David.** A demand for a square deal. Speech before the National child labor conference, recently held in the city of Washington. Appendix: 169-170.
Introduced into the Record, Jan. 23, 1915, by Mr. Webb.
Opposed to federal bill.

- 675 **Georgia. Laws, statutes, etc.** An act regulating the employment of children. Aug. 14, 1914. pt. 4: 4122-4123.
Introduced, with a few remarks, by Mr. Palmer.
- 676 **Knowland, Joseph B.** Child-labor. Speech in the House, Feb. 18, 1915. pt. 4: 4022-4023.
- 677 **News & Observer, Raleigh, N. C.** Editorial, "Trying to push back the ocean". pt. 5: 5338.
Introduced by Mr. Norris.
- 678 **U. S. Congress. House.** Child labor. Debate in the House, Feb. 15, 1915, on the bill (H. R. 12292) to prevent interstate commerce in the products of child labor, and for other purposes, as amended. pt. 4: 3827-3836.
The rules were suspended and the bill passed.

64TH CONG., 1ST SESS. VOL. 33 (CURRENT FILE).

- 679 **Ayres, William A.** Child labor. Extension of remarks in the House, Feb. 2, 1916. no. 36 (current file): 2270.
- 680 **Blackmon, Fred L.** Child labor. Speech in the House, Feb. 2, 1916. no. 39 (current file): 2541.
- 681 **Borland, William P.** The child-labor bill. Extension of remarks in the House, Jan. 26, 1916. no. 31 (current file): 1937-1938.
- 682 **Carter, William H.** Child labor. Extension of remarks in the House, Jan. 26, 1916. no. 30 (current file): 1843.
- 683 **Cary, William J.** The child labor bill. Extension of remarks in the House, Jan. 26, 1916. no. 39 (current file): 2542.
- 684 **Church, Denver S.** Child labor. Extension of remarks in the House, Feb. 2, 1916. no. 40 (current file): 2610-2611.
- 685 **Cline, Cyrus.** Child labor. Extension of remarks in the House, Jan. 26, 1916. no. 36 (current file): 2269.
- 686 **Cooper, John G.** Child-labor bill. Extension of remarks in the House, Jan. 28, 1916. no. 31 (current file): 1937.
- 687 **Cox, William E.** Child labor. Extension of remarks in the House, Jan. 26, 1916. no. 33 (current file): 2055-2056.
- 688 **Doughton, Robert L.** Child labor. Speech in the House, Feb. 2, 1916. no. 36 (current file): 2268-2269.
- 689 **Gallivan, James A.** Child labor in mills, factories, and mines. Extension of remarks in the House, Jan. 26, 1916. no. 33 (current file): 2056.
Includes an editorial from Boston Post of Sunday, Jan. 23, 1916, on "Child-labor Sunday."
- 690 **Gray, Finly H.** Child labor. Extension of remarks in the House, Feb. 2, 1916. no. 39 (current file): 2538-2539.
- 691 **Green, William B.** The constitutionality of law forbidding the transportation in interstate commerce of the products of child labor. Speech in the House, Feb. 2, 1916. no. 38 (current file): 2476.
- 692 **Hicks, Frederick C.** Right of Congress to regulate the shipment of the products of child labor as a part of interstate commerce. Extension of remarks in the House, Feb. 2, 1916. no. 39 (current file): 2544.
- 693 **Johnston, A. S.** Child labor. Letter favoring the passing of the Keating child-labor bill. Jan. 11, 1916. no. 29 (current file): 1785.
Introduced into the Record by Mr. Dyer, Jan. 26, 1916.
- 694 **Keating, Edward.** Child labor. Extension of remarks in the House, Feb. 2, 1916, on the bill (H. R. 8234) no. 35 (current file): 2189-2195.

- 695 Kennedy, Ambrose.** Child labor. Extension of remarks in the House, Jan. 26, 1916. no. 33 (current file): 2048-2049.
- 696 Kenyon, William S.** National child labor law. Speech in the Senate, Feb. 24, 1916. no. 56 (current file): 3661-3694.
Contains digest of comparative state legislation, and digest of child labor laws of Austria, Belgium, France, Germany, Great Britain, Italy, and Switzerland.
- 697 Lenroot, Irvine L.** Child labor. Speech in the House, Jan. 26, 1916. no. 30 (current file): 1843-1844.
- 698 London, Meyer.** Child labor. Speech in the House, Jan. 26, 1916. no. 39 (current file): 2537-2538.
- 699 McCracken, Robert M.** Child labor. Extension of remarks in the House, Feb. 2, 1916. no. 44 (current file): 2855-2856.
- 700 McCulloch, Roscoe C.** Child labor. Extension of remarks in the House, Jan. 26, 1916. no. 33 (current file): 2066.
- 701 Nolan, John I.** Child labor. Extension of remarks in the House, Feb. 2, 1916. no. 39 (current file): 2539-2540.
- 702 Page, Robert N.** Child labor. Speech in the House, Jan. 26, 1916. no. 38 (current file): 2465-2466.
- 703 Platt, Edmund.** The child-labor bill. Extension of remarks in the House, Feb. 2, 1916. no. 40 (current file): 2613-2614.
- 704 Randall, Charles H.** Child labor and humanitarian laws. Extension of remarks in the House, Feb. 2, 1916. no. 39 (current file): 2541.
- 705 Ricketts, Edwin D.** Child labor. Extension of remarks in the House, Jan. 27, 1916. no. 30 (current file): 1845-1846.
- 706 Schall, Thomas D.** Child labor. Extension of remarks in the House, Feb. 2, 1916. no. 38 (current file): 2470-2471.
- 707 Scott, John B. K.** Child-labor bill. Extension of remarks in the House, Feb. 2, 1916. no. 39 (current file): 2543-2544.
- 708 Sears, William J.** Child labor. Speech in the House, Feb. 2, 1916. no. 38 (current file): 2475.
- 709 Shouse, Jonett.** Child labor. Extension of remarks in the House, Jan. 26, 1916. no. 35 (current file): 2203.
- 710 Siegel, Isaac.** Child labor—Keating bill. Extension of remarks in the House, Jan. 26, 1916. no. 35 (current file): 2204-2205.
- 711 Smith, Addison T.** Child labor. Extension of remarks in the House, Feb. 2, 1916. no. 36 (current file): 2262-2264.
- 712 U. S. Congress. House.** Keating child-labor bill. Remarks in the House, Jan. 19, 1916, on the bill (H. R. 8234). no. 22 (current file): 1424-1425.
Messrs. Lewis of Md., Ragsdale, Watson of Va., Mann.
- 713 ———** Child labor. Debate in the House, Jan. 26, 1916, on the bill (H. R. 8234) to prevent interstate commerce in the products of child labor, and for other purposes. no. 29 (current file): 1744-1768.
Messrs. Lewis, Mann, Moore of Pa., Keating, Vare, Byrnes of S. C., Britt, Tague, Nicholls of S. C., Quin, Rogers, Sherley, Ragsdale, Cannon, Pou, Austin, Hardy, Howard, Dallinger, Adamson, Watson of Va.
- 714 ———** Child-labor bill. Debate in the House, Feb. 2, 1916, on the bill (H. R. 8234) no. 35 (current file): 2149-2174.
The bill was passed: p. 2174.
- 715 Van Dyke, Carl C.** Child-labor bill. Extension of remarks in the House, Jan. 29, 1916. no. 33 (current file): 2049-2050.
- 716 Vare, William S.** Child labor. Extension of remarks in the House, Jan. 26, 1916. no. 29 (current file): 1789-1790.

- 717 **Watson, Walter A.** Child labor. Speech in the House, Jan. 26, 1916. no. 46 (current file): 2601-2606.
- 718 **Webb, Edwin Y.** Child labor in mills, factories, and mines. Speech in the House, Jan. 26, 1916. no. 32 (current file): 1986-1993.
- 719 **Wood, William B.** Child labor. Speech in the House, Jan. 26, 1916. no. 30 (current file): 1846.

STATISTICS.

- 720 **Bliss, H. L.** Census statistics of child labor. *Journal of political economy*, Mar. 1905, v. 13: 245-257. HB1.J7,v.13
- 721 **Clopper, Edward M.** Child worker in the Census report of 1910. *Survey*, Sept. 26, 1914, v. 32: 628-629. HV1.C4,v.32
- 722 ——— The extent of child labor officially measured. *Child labor bulletin*, Nov. 1914, v. 3, no. 3: 30-36. HD6250.U3N4,v.3,no.3
Also printed as National child labor committee, Pamphlet no. 257. 8 p.
- 723 **Devine, E. T.** Some statistics of child labor. *American academy of political and social science, Annals*, May, 1903, v. 21: 505-506. H1.A4,v.21
- 724 **Drown, Frank S.** The Massachusetts bureau of statistics. *American academy of political and social science, Annals, Supplement*, Mar. 1910, v. 35: 134-136. H1.A4,v.35
- 725 **Hall, Fred S.** Child labor statistics. *American academy of political and social science, Annals, Supplement*, Mar. 1910, v. 35: 114-126. H1.A4,v.35
National child labor committee. Pamphlet no. 130. 13 p. HD6250.U3N2,no.130
- 726 **National child labor committee, New York.** What state laws and the federal census say about child labor. New York city, 1915. 4 tables. 23^{cm}. (Its Pamphlet no. 248, July, 1915) HD6250.U3N2,no.248
- 727 **Sargent, Frank B.** Census statistics on employment of children in manufactures. *Journal of political economy*, Oct. 1910, v. 18: 628-633. HB1.J7,v.18
- 728 **U. S. Bureau of the census.** Child labor in the District of Columbia, based on unpublished information derived from the schedules of the Twelfth census, 1900. Washington, Govt. print. off., 1906. 21 p. 30x234^{cm}. Bulletin 68) HA201.1900.A12,no.68
HD6250.U4D6 1906
- 729 ——— Child labor in the United States, based on unpublished information derived from the schedules of the Twelfth census, 1900. Washington, Govt. print. off., 1907. 200 p. 30x234^{cm}. (Bulletin 69) HA201.1900.A12,no.69
HD6250.U3A3
- 729a ——— Manufactures, 1915. Washington, Govt. print. off., 1907-08. 4 v. diags. 30^{cm}.
- 730 ——— Thirteenth census of the United States, 1910. Vol. IV. Population, 1910. Occupation statistics. Washington, Govt. print. off., 1914. 615 p. 46^{cm}. HA261.1910.A15,v.4
Contains statistics of children by age periods of 10 to 13, 14 to 15 years, arranged by specified occupations, states, and cities. See also volumes on Manufactures, and Mines and quarries.
- 731 ——— Index to occupations, alphabetical and classified. Washington, Govt. print. off., 1915. 414 p. 23^{cm}. HA261.1910.Z4
- 732 **Whittemore, Gilbert E.** The Providence school census system. *American academy of political and social science, Annals, Supplement*, Mar. 1910, v. 35: 130-133. H1.A4,v.35

- 733 **Williams, John.** Uniform systems of child labor statistics. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 144-152.
H1.A4,v.33
National child labor committee. Pamphlet no. 112. 9 p.
HD6250.U3N2,no.112

FOREIGN COUNTRIES.

GENERAL.

- 734 **Abelsdorff, W.** Kinderarbeit (gewerbliche) (*In* Grotjahn, A. and J. Kaup; Handwörterbuch der sozialen Hygiene. Leipzig, 1912. 27½^{cm}. v. 1, p. 591-610)
RA425.G8,v.1
Deutschland; Österreich; Italien; Schweiz; Niederlande; Gross-britannien; Frankreich; Japan; Dänemark; Vereinigte Staaten; Literatur.
- 735 **Annuaire de la législation du travail**, publié par l'Office du travail de Belgique. 1-16. année; 1897-1912. Bruxelles, 1898-1914. 16 v. 24½^{cm}.
HD7806.A5
Contains texts of the laws of the various countries regulating child labor; see subject index to each volume.
- 736 **Arendt, Henriette, sister.** Kleine weisse Sklaven. Berlin-Charlottenburg, Vita, deutsches verlagshaus [1911] 208 p. 19^{cm}.
HV763.A7
- 737 **Brooke, Emma Frances.** A tabulation of the factory laws of European countries in so far as they relate to the hours of labour, and to special legislation for women, young persons, and children. London, G. Richards, 1898. 52 p. 22½^{cm}.
HD6081.B8
- 738 **Congrès international du patronage de la jeunesse ouvrière, Paris, 1900.** Congrès international du patronage de la jeunesse ouvrière tenu à Paris du 10 au 13 juin 1900; procès-verbaux sommaires, par M. Pierre Griffaton. Paris, Imprimerie nationale, 1901. 27 p. 26½^{cm}.
HD6229.C7
- 739 **[Ducpétiaux, Édouard]** De la condition des ouvriers mineurs dans la Grande-Bretagne et en Belgique. Analyse de l'enquête ordonnée par le Parlement anglais sur le travail des enfants dans les mines. Bruxelles, Impr. de Vandoooren frères, 1843. 64 p. illus. 23^{cm}.
HD6250.G7D8
"Extrait des Annales des travaux publics de Belgique," v. 1, p. [359]-420.
- 740 **Fischer, Alfons.** Die Nachtarbeit der Jugendlichen. Annalen für soziale Politik und Gesetzgebung, 1911-1912, v. 1: 321-324.
HD6951.A6,v.1
- 741 **France. Ministère des affaires étrangères.** Conférence internationale de Berlin. 15-29 mars 1890. Paris, Imprimerie nationale, 1890. 3 p. l., 128 p. 32^{cm}.
JX683.A25 1890
"Protocoles et annexes"; p. [25]-128.
- 742 **Germany. Statistisches Amt. Abteilung für Arbeiterstatistik.** Gebiete und Methoden der amtlichen Arbeiterstatistik in den wichtigsten Industriestaaten. Berlin, Carl Heymanns Verlag, 1913. vii, 695 p. 25^{cm}. (Beiträge zur Arbeiter-Statistik, 12)
HD8441.A25,12
Statistik der Frauen-und Kinderarbeit: Grossbritannien; Vereinigte Staaten von Amerika; Italien; Niederlande; Österreich; Deutsches Reich: p. 378-433.
- 743 **Gt. Brit. Home dept.** International conference on labour. Return to an address of the honourable the House of commons, dated 28 March, 1905. Home office, 3 August 1905. Thomas Cochrane. (Mr. Herbert Samuel.) Ordered, by the House of commons, to be printed, 3 August 1905. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode [1905] 39 p., 1 l. incl. fold. tab. 33½^{cm}. ([Parliament, 1905. H. of C. Repts. and papers] 291)
HD7260.16 1890b
Extracts and reports regarding employment of women, children, and young persons.

- 744 **Holland, Robert Wolstenholme.** The law relating to the child, its protection, education, and employment; with introduction on the laws of Spain, Germany, France, and Italy, and bibliography. London, New York [etc.] Sir I. Pitman & sons, [1914] xxiv, 142 p. 22^{cm}.
Restrictions on the employment of children and young persons: p. 116-126.
- 745 **International association for labor legislation.** Memorandum on the international establishment of a ten-hour maximum working day for women and young persons in industrial employment. Washington [Govt. print. off.] 1913. 63 p. 27½^{cm}.
HD6064.I5
Issued also as Bulletin of the United States Bureau of labor statistics, whole no. 118, Miscellaneous series, no. 3; and as House doc. 1463, 62d Cong. 3d sess.
- 746 ——— **Memorandum on the international prohibition of the industrial night work of young persons.** Washington [Govt. print. off.] 1913. 66 p. 28^{cm}.
HD5113.I6
Issued also as Bulletin of the United States Bureau of labor statistics, whole no. 117, Miscellaneous series, no. 2; and as House doc. 1462, 62d Cong. 3d sess.
- 747 **The International congress of women, London, 1899.** The International congress of women of 1899; ed. by the Countess of Aberdeen. vi. Women in industrial life. London, T. F. Unwin, 1900. 252 p. 20½^{cm}.
Special labour legislation for children, p. 50-55. HQ1106 1899
- 748 **International labor office.** Bulletin, v. 1, 1906-v. 10, 1915. London, The Pioneer press, ltd., 1906-1915. 10 v. 24½^{cm}.
HD7801.I6
Contains the laws and decrees relating to the protection of children, young persons and women; apprenticeship.
- 749 ——— **First comparative report on the administration of labour laws. Inspection in Europe.** London, P. S. King & son, 1911. xv, 109 p. fold. tables. 23^{cm}.
HD3656.I7
- 750 **Kenyon, William S.** National child labor law. Speech in the Senate, Feb. 24, 1916. Congressional record, 64th Cong., 1st sess., v. 53, no. 56 (current file): 3661-3694.
Contains digest of child labor laws of Austria, Belgium, France, Germany, Great Britain, Italy, and Switzerland.
- 751 **Page, Anna B.** Labour laws for women and children at home and abroad. Women's industrial news, no. 63, Oct. 1913, p. 171-186.
- 752 **Ramaix, de.** La réforme sociale et économique en Europe et dans les États Unis de l'Amérique du Nord. (*In* Belgium. Ministère des affaires étrangères. Recueil des rapports des secrétaires de légation de Belgique. Bruxelles, 1889. v. 6, p. 321-674.)
HC5.B5,v.6
Réglementation du travail des femmes et des enfants: Germany, p. 382-387; Austria, p. 410-413; Hungary, p. 419-420; Great Britain, p. 440-447; France, p. 471-478; Italy, p. 489-491; Switzerland, p. 508-513; The Netherlands, p. 524-529; Luxemburg, p. 535-537; Spain, p. 541-544; Portugal, p. 549-554; Denmark, p. 560-561; Sweden, p. 572-574; Norway, p. 585-587; Russia, p. 592-594; Roumania, p. 602; United States, p. 613-623.
A summary of all laws relating to child labor in the various countries.
- 753 **Rich, Edith J.** Child labor in Europe. American academy of political and social science, Annals, May, 1903, v. 21: 499-502.
H1.A4,v.21
- 754 **Shadwell, Arthur.** Industrial efficiency; a comparative study of industrial life in England, Germany and America. London, New York and Bombay. Longmans, Green and co., 1906. 2 v. 23½^{cm}.
HC53.2.S5
Protection of children: Factory laws in England, v. 2, p. 7-19; in Germany, v. 2, p. 19-27; in the United States of America, v. 2, p. 35-46.
- 755 **Soziale Rundschau.** Hrg. vom Arbeitsstatistischen Amte im K. K. Handelsministerium. 1900-1914. Wien, A. Hölder [1900-1914] 23½^{cm} monthly.
HD8401.A2
Contains translations in German of laws of various countries relating to child labor.

- 756 **Stieda, Wilhelm.** Jugendliche Arbeiter. (*In Handwörterbuch der Staatswissenschaften.* Hrsg. von J. Conrad. 3. Aufl. Jena, 1910. v. 5, p. 725-740) HD45.H22,v.5
Literatur: p. 740.
- 757 **U. S. Bureau of labor.** Laws relating to child labor in European countries. (*In its Bulletin.* July, 1905, no. 59: 302-319) HD8051.A5,no.59
A résumé of the laws regulating child labor in Austria, Belgium, France, Germany, Great Britain, Italy, and Switzerland.
- 758 ——— **Bureau of labor statistics.** Administration of labor laws and factory inspection in certain European countries. Washington, Govt. print. off., 1914. 310 p. 23½^{cm}. (Bulletin, whole no. 142. Foreign labor laws series, no. 1) U. S. 63d Cong. 2d sess. House. Doc. 905. HD8051.A62,no.142
For information concerning child labor in Austria, Belgium, France, Germany, Great Britain and Switzerland, see Index, p. 303.
- 759 **Veditz, Charles William A.** Child labor legislation in Europe. U. S. Bureau of labor. Bulletin, July, 1910, no. 89: 1-413. HD8051.A5,no.89
- 760 **Zanten, J. H. van.** Die Arbeiterschutzgesetzgebung in den europäischen Ländern. Jena, G. Fischer, 1902. xii, 338 p. 26^{cm}. HD7874.Z2

AUSTRIA.

- 761 **Agahd, Konrad.** Kinderarbeit und gesetzlicher Kinderschutz in Österreich und Deutschland. Zeitschrift für Socialwissenschaft, May, 1904, v. 7: 330-335. H5.Z6,v.7
- 762 **Austria. Arbeitstatistisches Amt.** Erhebung über die Kinderarbeit in Österreich im Jahre 1908. Wien, A. Hölder, 1910-1913. 3 v. 30½^{cm}. HD6250.A9A3
Also printed in Soziale Rundschau, 1907, v. 2, p. 395-397; 1908, v. 2, p. 353-357, 414-449, 560-613; 1909, v. 1, p. 64-87, 218-327, 539-570, 733-761, 995-1027; 1909, v. 2, p. 56-81, 375-445, 561-608, 749-802; 1911, v. 1, p. 17-21, 95-131; 1912, v. 1, p. 14-15. HD8401.A2
- 763 **Die Erhebung über die Kinderarbeit in Österreich im Jahre 1908.** Germany. Statistisches Amt. Abteilung für Arbeiterstatistik. Reichs-Arbeitsblatt, Feb. 1912, v. 10: 113-116. HD8441.A3,v.10
- 764 **Erhebung über die Kinderarbeit (Bayern).** Soziale Rundschau, Nov. 1908, v. 2, p. 614-615. HD8401.A2 1908,v.2
From Zeitschrift des königlich bayerischen statistischen Bureau, 1908.
- 765 **Fehlinger, Hans.** Child labor in Austria. American federationist, July, 1903, v. 10: 565. HD8055.A5A2,v.10
- 766 **Freundlich, Emmy.** Kinderarbeit in Österreich. Neue Zeit, Mar. 10, 1911, v. 29, pt. 1: 815-818. HX6.N6,v.29,pt.1
- 767 **Hauck, Karl.** Die Nachtarbeit der Jugendlichen in der österreichischen Industrie. Wien, F. Deuticke, 1907. 59 p. diagrs. 23½^{cm}. (Schriften der Österr. Gesellschaft für Arbeiterschutz. xi. Hft.) HD5113.H36
- 768 **Herbst, Rudolf.** Die gewerbliche Nachtarbeit der jugendlichen Arbeiter und Kinder in Österreich. Wien, F. Deuticke, 1906. 45 p. 24^{cm}. (Schriften der Österr. Gesellschaft für Arbeiterschutz. viii. Hft.) HD5113.H53
Bibliography: p. [5].
- 769 **Jeuschik, A.** L'organisation la jeunesse ouvrière en Autriche. Mouvement socialiste, July-Aug. 1913, v. 34: 77-89. HX5.M9,v.34
- 770 **Die Kinderarbeit in Österreich.** Soziale Praxis, May 2, 1912, v. 21: 969-971. H5.S7,v.21

- 771 **Kraus, Siegmund.** *Kinderarbeit und gesetzlicher Kinderschutz in Österreich.* Wien und Leipzig, F. Deuticke, 1904. vi, 203 p. 24^{cm}. (Wiener staatswissenschaftliche Studien. 5. Bd., 3. Hft.) HB41.W6,v.5
"Literaturnachweis": p. [300]-303.
- 772 **Lederer, Max.** *Zur gesetzlichen Regelung der Kinderarbeit in Österreich.* Soziale Praxis, July 17, 1913, v. 22: 1175-1176. H5.S7,v.22
- 773 **Mises, Ludwig von.** *Zur Geschichte der österreichischen Fabrikgesetzgebung.* Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung, 1905. v. 14: 209-271. HB5.Z5,v.14
- 774 **Popp, Adelheid.** *Die Kinderarbeit in Österreich.* Neue Zeit, Sept. 26, 1913, v. 31, pt. 2: 1012-1021. HX6.N6,v.31,pt.2
- 775 **Schiff, Walter.** *Die Kinderarbeit in Oesterreich.* Archiv für Sozialwissenschaft und Sozialpolitik, July, Sept. 1913, v. 37: 131-174; 483-520. H5.A8,v.37
- 776 **Trauttmansdorff, Ferdinand Graf von.** *Kinderarbeit.* Österreichische Rundschau, July 15, 1914, v. 40: 121-133. AP30.O3,v.40
- 777 **Vedits, Charles William August.** *Child-labor legislation in Austria.* (In U. S. Bureau of labor. Bulletin, July, 1910. no. 89. Washington, 1910. p. 3-92) HD8051.A5,no.89

HUNGARY.

- 778 **Heller, Wolfgang.** *Die Kinderarbeit in Ungarn.* Jena, G. Fischer, 1912. 38 p. 24^{cm}. (Schriften der ungarischen Vereinigung für gesetzlichen Arbeiterschutz, Hft. 10.) HD6250.A97H7
- 779 **Ruffy, Paul de.** *La protection de l'enfance par l'état et le travail des enfants.* Revue de Hongrie, Sept. 15, 1909, v. 4: 302-317. AP25.R4,v.4
- 780 ——— *La protection de l'enfance par l'état et le travail des enfants.* (In Bosnyák, Zoltán. *Le droit de l'enfant abandonné et le système hongrois de protection de l'enfance.* Budapest, 1909, p. 165-180) HV759.H8B7
- 781 **Schwimmer, Rosika.** *Staatlicher Kinderschutz in Ungarn.* Deutschland, Jan., 1905, v. 5: 429-435. AP30.D6,v.5

BELGIUM.

- 782 **Belgium. Corps législatif. Chambre des représentants.** *Documents relatifs au travail des enfants et des femmes dans les manufactures, les mines, etc. État de la question en Belgique et à l'étranger.* Bruxelles, F. Gobbaerts, imprimeur du roi, 1871. 462 p. incl. tables. 32^{1/2}cm. HD6250.N3A4
- 783 ——— **Laws, statutes, etc.** *Act to amend the act of 13th December, 1889, relating to the employment of women, young persons, and children. (Dated May 26, 1914.)* International labor office. Bulletin, 1915, v. 10, nos. 1, 2: 14-16. HD7801.I6,v.10
- 784 ——— **Lois et règlements concernant la police du travail et le régime des établissements classés.** Bruxelles, Office de publicité, J. Lebègue et cie [etc.] 1909. 374 p. 19^{1/2}cm. HD7896.A5
Travail des femmes, des adolescents et des enfants dans les établissements industriels: p. 5-83.
- 785 ——— **Wetten en verordeningen betreffende den arbeid der vrouwen en kinderen, de politie der ingedeelde inrichtingen en der open groeven, het betalen van het loongeld aan de werklieden, de werkplaatsverordeningen, de arbeidsovereenkomst en het arbeidsopzicht.** Brussel, J. Lebègue en cie, 1903. 313 p. 19^{cm}. HD6083.N3A5 1903

- 786 **Belgium. Ministère de l'intérieur.** Enquête sur les conditions du travail des enfants et des femmes dans les manufactures. [Bruxelles, 1860] At head of title (No. 41) Chambre des représentants. Session de 1859-1860. 116 p. 31^{cm}. HD6156.A5 1860
- 787 — **Office du travail.** Rapports annuels de l'Inspection du travail. 1.-17. année, 1895-1911. Bruxelles, 1896-1912. 8 v. pl. (partly col.) plans, diagr. 24¹/₂^{cm}. HD8501.A5
Included, 1896-1904: Administration des mines. Rapport général sur l'application . . . de la loi du 13 décembre 1889 sur le travail des femmes, des adolescents et des enfants.
- 788 — (Territory under German occupation, 1914-) Laws, statutes, etc. Notification by the Governor-General in Belgium with respect to the text of the act relating to the employment of women and children. Dated Dec. 15, 1914. International labor office. Bulletin, 1915, v. 10, nos. 1, 2: 61-64. HD7801.I6,v.10
- 789 **Dubois, E.** Child labor in Belgium. American academy of political and social science, Annals, July, 1902, v. 20: 201-220. H1.A4,v.20
- 790 **Ducpétiaux, Édouard.** De la condition physique et morale des jeunes ouvriers et des moyens de l'améliorer. Bruxelles, Meline, Cans et compagnie, 1843. 2 v. 24^{cm}. HD6231.D8
- 791 **McLean, Francis H., and Emile Waxweiler.** Child labor in Belgium. American academy of political and social science, Annals, Sept. 1906, v. 28: 303-313. H1.A4,v.28
- 792 **Ramaix, de.** La législation du travail en Belgique. (In Belgium. Ministère des affaires étrangères. Recueil des rapports des secrétaires de légation de Belgique. Bruxelles, 1890. v. 7, p. 1-53) HC5.B5,v.7
Réglementation du travail des femmes et des enfants: p. 41-43.
- 793 **Rowntree, B. Seebohm.** Land & labour; lessons from Belgium. London, Macmillan and co., limited, 1910. xx, 633 p. plates, maps, plans, tables, diagrs. 23^{cm}. HC315.R8
See Index under Child labour and Juvenile workers.
- 794 **Veditz, Charles William August.** Child-labor legislation in Belgium. (In U. S. Bureau of labor. Bulletin, July, 1910, no. 89. Washington, 1910. p. 93-143) HD8051.A5,no.89
- 795 **Vermeersch, Arthur.** Manuel social, la législation et les oeuvres en Belgique, avec une préface de M. Gérard Cooreman. Nouv. éd., entièrement refondue. Louvain, A. Uystpruyt; [etc., etc.] 1904. xxxix, 1009 p. 23¹/₂^{cm}.
La loi sur le travail des femmes et des enfants: p. 185-193. HD8506.V3

FRANCE.

- 796 **Bouquet, Louis.** La réglementation du travail dans l'industrie. 5. éd. entièrement refondue et mise à jour. Paris [etc.] Berger-Levrault & cie, 1904. viii, 398 p. 22¹/₂^{cm}. HD7883.B7
Enfants . . . employés à des travaux agricoles, p. 16-18; Age d'admission au travail, p. 37-46; Durée du travail des enfants, p. 49-57; Travail de nuit des enfants, p. 63-89; Réglementation des travaux souterrains: Travail des enfants, p. 105-117; Interdiction aux enfants . . . d'effectuer certains travaux dangereux, p. 135-153.
- 797 **Brunhes, H. J., and F. H. McLean.** Child labor in France. Charities, Apr. 22, 1905, v. 14: 676-682. HV1.C4,v.14
- 798 **Bry, Georges Ernest.** Cours élémentaire de législation industrielle; lois du travail et de la prévoyance sociale, questions ouvrières. 4. éd. entièrement rev. Paris, L. Larose & I. Tenin, 1909. viii, 778 p. 22¹/₂^{cm}. HD3621.B82
Réglementation du travail des enfants et des femmes: p. 316-356.

- 799 **Courcelle, Louis.** Code annoté des lois ouvrières. Paris, Marchal et Billard, 1902. xxiv, 321 p. 19½^{cm}.
 "Loi du 2 novembre 1892. Sur le travail des enfants, des filles mineures et des femmes dans les établissements industriels": p. 263-304.
- 800 ——— **Traité de législation ouvrière.** Avec une préface de Paul Beauregard. Paris, V. Giard & E. Brière, 1902. (2), iii, (1) xv, (1), 584 p. 23^{cm}.
 "Surveillance, hygiène et sécurité des ouvriers: Enfants, filles mineures et femmes": p. 115-189.
- 801 **Dagan, Henri.** Les enfants "industrialisés". Nouvelle revue, June 15, 1903, v. 22: 433-444. AP20.N8,v.22
- 802 **France. Assemblée nationale, 1871. Chambre des députés. Commission du travail.** Rapport fait au nom de la Commission du travail chargée d'examiner la proposition de loi de M. Lemire tendant à supprimer le travail de nuit des enfants dans les usines à feu continu, par M. Lemire, député. [Paris, Martinet, imprimeur de la Chambre des députés, 1910] 13 p. 26^{cm}. (Chambre des députés. 10. légial. Sess. extr. de 1910, no. 599. Annexe au Procès-verbal. 16 décembre 1910) HD6250.F8A5
- 803 ——— **Bureau des manufactures.** Rapport du Bureau des manufactures sur les réponses à la circulaire du 31 juillet relative à l'emploi des enfants dans les fabriques. [Paris, Imprimerie royale, 1837] 17 p. 22½^{cm}. [With France. Conseil général de l'agriculture, des manufactures et du commerce. Procès-verbaux. Paris, 1838] HC271.A2 1837-8
- 804 ——— **Conseil supérieur du travail.** Âge d'admission au service de la clientèle dans les auberges, hôtels, etc. Rapport de M. Abel Craissac, au nom de la Commission permanente. Procès-verbaux, enquête et documents. Paris, Imprimerie nationale. 1913. x, 82 p., 1 l. incl. tables. 27½^{cm}. HD6073.W3F8
- 805 ——— **Laws, statutes, etc.** Code du travail et de la prévoyance sociale, avec renvois aux ouvrages de MM. Dalloz, pub. sous la direction de MM. Gaston Griolet . . . [et] Charles Vergé . . . avec la collaboration de M. Henry Bourdeaux. 5. éd., rev., cor. et augm. Paris, Dalloz, 1914. vii, [1], 330, 32 p. 15½^{cm}. (Petite collection Dalloz)
See Index: p. 22-23, under Enfants.
- 806 ——— **Ministère du travail et de la prévoyance sociale.** L'application, en 1912, des lois réglementant le travail. Travail des femmes et des enfants. (*In its* Bulletin, Oct.-Dec. 1913, v. 20: 976-985; 1073-1090; 1206-1215.) HD8421.A17,v.20
- 807 ——— **Décret concernant les travaux dangereux interdits aux enfants et aux femmes.** (*In France. Journal officiel*, Mar. 26, 1914. p. 2777-2783.) J7F2A,Mar.,1914
 An English translation of this decree is contained in the Bulletin of International labor office for Oct. 1915, v. 10: 103-105.
- 808 ——— **Parlement, 1910. Chambre des députés.** Proposition de loi tendant à la répression de l'exploitation de l'enfance, présentée par M. Georges Berry, député. (Renvoyée à la Commission relative au vagabondage et à la mendicité) Dec. 5, 1910. (*In its* Documents parlementaires, 1911. Annexe no. 547. [Paris, 1911] F°. p.170-174.)
- 809 [**Hutchins, Miss B. Leigh**] Labour laws for women in France. [London] Women's industrial council, 1907. cover-title, 11, [1] p. 21½^{cm}. HD6083.F8H8
- 810 **Lauffer, René.** La protection de l'enfance ouvrière. Les données scientifiques sur le développement des apprentis et jeunes ouvriers. Nouvelle revue, Apr. 15, 1911, 3d ser. v. 20: 433-451; May 1, 1911, 3d ser. v. 21: 3-18. AP20.N8,v.20,21

- 811 **Massé, Daniel.** Législation du travail et lois ouvrières; classification, commentaire, jurisprudence, législation comparée, projets et propositions de lois. Paris, Nancy, Berger-Levrault et cie, 1904. xii, 974 p. tables. 25½^{cm}.
"Protection générale des enfants, des filles mineures et des femmes," p. 253-303.
- 812 **Pandectes françaises.** Nouveau répertoire de doctrine, de législation et de jurisprudence. v. 57. Paris, F. Pichon et Durand-Auzias, 1905. 855 p. 27¼^{cm}.
Titre I, chapitre deuxième: Travail des enfants et des femmes: p. 480-548.
Titre II, chapitre troisième, Droit comparé (Comparative law) p. 800-831, contains a summary of the principal laws relating to child labor in Germany, Great Britain, Austria-Hungary, Belgium, Denmark, Spain, United States, Italy, Luxemburg, Norway, the Netherlands, Portugal, Russia, Sweden and Switzerland.
- 813 **Payen, Édouard.** L'application de la loi de 1892 sur le travail des enfants et des femmes. Économiste français, Oct. 23, 1909, v. 37: 599-601.
HB3.E3,v.37
- 814 **Renard, Georges.** L'enfant dans l'industrie modern: Le droit de l'enfant. Revue politique et littéraire, Revue bleue, Dec. 17, 23, 1910, 48. année: 780-783; 809-812.
AP20.R64,48. année
- 815 **Veditz, Charles William August.** Child-labor legislation in France. (In U. S. Bureau of labor. Bulletin, July, 1910, no. 89. Washington, 1910. p. 143-231)
HD8051.A5,no.89
- 816 **Villermé, Louis René.** Tableau de l'état physique et moral des ouvriers employés dans les manufactures de coton, de laine et de soie. Paris, J. Renouard et cie, 1840. 2 v. 22^{cm}.
HD8039.T42F89
Durée journalière du travail: v. 2, p. 83-109; Enfants employés dans les manufactures: v. 2, p. 110-125.

GERMANY.

- 817 **Abelsdorff, Walter.** Gewerbmässige Kinderarbeit. Leipzig, Felix Dietrich, 1913. 26 p. 20¼^{cm}. (Kultur und Fortschritt, no. 455-56)
Inhalt: Einleitung.—1. Deutschland. 2. Oesterreich. 3. Italien. 4. Schweiz. 5. Niederlande. 6. Grossbritannien. 7. Frankreich. 8. Japan. 9. Dänemark. 10. Vereinigte Staaten. Literatur.
- 818 **Adler, Georg and Bernard Harms.** Jugendliche Arbeiter. (In Elster, Ludwig. Wörterbuch der Volkswirtschaft. 3. Aufl. Jena, 1911. 27^{cm}. v. 1, p. 1392-1397)
HB61.E53,v.1
Literatur: p. 1397.
Contains statistics for the year 1907.
- 819 **Agahd, Konrad.** [Child labor in Germany.] (In United States. Report of the Commissioner of education, 1899-1900, v. 1, p. 816-825. Washington, 1901. 23½^{cm}.)
L111.A3 1899-1900
- 820 ——— Die Erwerbsthätigkeit schulpflichtiger Kinder im Deutschen Reich. (In Archiv für soziale Gesetzgebung und Statistik, v. 12, p. 373-428. Berlin, 1898. 8°)
H5.A8,v.12
- 821 ——— Die gewerbliche Kinderarbeit in Kiel. (In Soziale Praxis, v. 12, Aug. 6, 1903, cols. 1184-1186)
H5.S7,v.12
- 822 ——— Kinderarbeit in Chemnitz. (In Soziale Praxis, v. 11, Jan. 16, 1902, cols. 404-406)
H5.S7,v.11
- 823 ——— Kinderarbeit und Gesetz gegen die ausnutzung kindlicher Arbeitskraft in Deutschland. (Unter Berücksichtigung der Gesetzgebung des Auslandes und der Beschäftigung der Kinder in der Landwirtschaft) Jena, G. Fischer, 1902. xii, 206 p. 24^{cm}.
HD6243.G3A4

- 824 **Agard, Konrad.** Zu den Grundzügen der gesetzlichen Regelung der gewerblichen Kinderarbeit ausserhalb der Fabriken. (*In Soziale Praxis*, v. 10, Sept. 12, 1901, cols. 1257-1262) H5.S7.v.10
- 825 ——— Zur Würdigung der Statistik über die gewerbliche Kinderarbeit ausserhalb der Fabriken in Deutschland. (*In Soziale Praxis*, v. 10, Oct. 18, 1900, cols. 52-56) H5.S7.v.10
- 826 ——— and **M. von Schuls.** Gesetz betreffend Kinderarbeit in gewerblichen Betrieben. Vom 30. märz 1903. 3. Aufl. Jena, G. Fischer, 1905. xvi, 408 p. 22^{cm}. (Schriften der Gesellschaft für soziale Reform. Hrag. von dem Vorstände. Hft. 10) HD6243.G3A44
- 827 **Anton, Günther Kurt.** Geschichte der preussischen Fabrikgesetzgebung bis zu ihrer Aufnahme durch die Reichsgewerbeordnung. . . . Leipzig, Duncker & Humblot, 1891. xvi, 202 p. 8°. (Staats- und socialwissenschaftliche Forschungen. Bd. 11.hft. 2) HB41.S7.v.11.pt.2
Geschichte der preussischen Gesetzgebung zum Schutze der jugendlichen Fabrikarbeiter, p. 1-122.
- 828 **Berger, T. Ph. and L. Wilhelmi,** Gewerbeordnung für das Deutsche Reich, nebst den für das Reich und Preussen erlassenen Ausführungsbestimmungen. 18. veränderte Aufl. bearb. von Karl Flesch . . . in verbindung mit Friedrich Hiller [und] Hermann Luppe. Berlin, J. Guttentag, 1910. 1 p. l., [5]-971, [1] p. 13½^{cm}. (Guttentag'sche Sammlung deutscher Reichsgesetze. Nr. 6)
——— Ergänzungsheft zur achtzehnten Auflage der Gewerbeordnung für das Deutsche Reich. Berlin, J. Guttentag, 1912. 103 p. 13½^{cm}.
- 829 **Bierer, Willy.** Die hausindustrielle Kinderarbeit im Kreise Sonneberg; ein Beitrag zur Kritik des Kinderschutzgesetzes. Tübingen, J. C. B. Mohr (P. Siebeck) 1913. vi p., 11., 167 p. 24^{cm}. (Archiv für Sozialwissenschaft und Sozialpolitik. Ergänzungsheft xi) HD6250.G4B5
"Gesetz betr. Kinderarbeit in gewerblichen Betrieben. Vom. 30. März 1903": p. 159-165.
- 830 **Bloomfield, Meyer.** The school and the start in life; a study of the relation between school and employment in England, Scotland, and Germany. Washington, Govt. print. off., 1914. 143 p. 23^{cm}. (U. S. Bureau of education. Bulletin, 1914, no. 4. Whole no. 575) HF5381.B5
Bibliography: p. 133-142.
- 831 **Child labor in Germany.** Square deal, July, 1914, v. 14: 547-548. HD6500.S7.v.14
Shows number of children employed in various mills and factories during 1910 and 1911.
- 832 **Child labor in Germany outside of factories.** (*In United States. Report of the commissioner of education, 1900-1901, v. 1, p. 54-80. Washington, 1902. 23½^{cm}*) L111.A3 1900/01
"Translated from Vierteljahrshefte des Kaiserlichen Statistischen Amts. 1900, Heft III."
Results of an official inquiry (1898) by the Imperial Chancellery.
CONTENTS.—Purpose and nature of inquiry; Results of the inquiry: Number of children employed outside of factories; Kinds of occupation of children; Age of wage-earning children; Daily working hours; Arrangement of workrooms; Legal conditions of child labor; Wages of children; Police regulations concerning child labor; Propositions for the future regulation of industrial child labor; Supplement 1. Regulations concerning industrial occupation of school children in some foreign countries: England; France; Austria; Other countries; Supplement 2. Discussion (A translation of an article by Dr. Wiese in the *Berlin Tägliche Rundschau*, No. 275, 1899).
- 833 **Daurnay, Maxime.** L'enquête allemande sur le travail des enfants hors de la fabrique. (*In Questions pratiques de législation ouvrière et d'économie sociale*, v. 2, 1901, p. 105-109. Paris, 1902. 23^{cm})

- 834 **De Voss, Emilia V. Kantlack.** The child in Germany. Child, Oct. 1910, v. 1: 25-35. HQ750.A2C4,v.1
State measures regarding the employment of children, p. 33.
- 835 **Edlmann, Edith.** Juvenile labour exchanges and apprenticeship bureaux in Germany. Contemporary review, Aug. 1913, v. 104: 230-239. AP4.C7,v.104
- 836 **Eahe, Arthur.** Der gesetzliche Arbeitsschutz der gewerblich beschäftigten Jugend. Vortrag gehalten im Ferienkursus der Gehe-stiftung zu Dresden (26. april 1905) Dresden: v. Zahn & Jaensch, 1905. 52 p. 234^{cm}. (In Neue Zeit und Streitfragen, hrsg. von der Gehe-stiftung zu Dresden. Dresden, 1905. 2. jahrg.) H5.N4
Jahrbuch der Gehe-stiftung zu Dresden, bd. xi, p. [247]-298.
- 837 **Falkenbach, Joseph.** Employment of children in German factories. (In United States. Consular reports, v. 30, no. 106, July, 1889, p. 380-381) HC1.R2,v.30 .
- 838 **Feld, Wilhelm.** Die Kinder der in fabriken arbeitenden Frauen und ihre Verpflegung, mit besonderer Berücksichtigung der Crimmitschauer Arbeiterinnen. Dresden, O. V. Böhmert, 1906. 4 p. l., 87, [1] p. incl. tables. 254^{cm}. (Probleme des Fürsorge; Abhandlungen der Centrale für private Fürsorge in Frankfurt am Main. 3. Bd.) HV764.F8F5
- 839 **Findeisen, H.** Das Reichsgesetz betreffend Kinderarbeit in gewerblichen Betrieben vom 30. März 1903 systematisch dargestellt nebst Ausführungsbestimmungen aus dem Reich, den königreichen Preussen, Bayern und Sachsen, sowie den thüringischen Staaten. Leipzig, Duncker & Humblot, 1904. viii, 104 p. 224^{cm}. HD6243.G3F4
"Literaturverzeichnis": p. [vii]-viii.
- 840 **Francke, E.** Die "Jugendlichen". (Kinderarbeit-, Kriminalität und-Schutz) Soziale Praxis, May 11, 1911, v. 20: 986-988. H5.S7,v.20
- 841 **Fürth, Henriette.** Gewerbliche Kinderarbeit in Deutschland. Dokumente der Frauen, Dec. 1, 1900, v. 4, p. 533-541.
- 842 **Germany. Laws, statutes, etc.** Gewerbeordnung für das Deutsche Reich in ihrer neuesten Fassung, mit sämtlichen Ausführungsbestimmungen für das Reich und für Preussen, sowie mit dem Kinderschutzgesetz, dem Stellenvermittlergesetz, dem Hausarbeitsgesetz und dem Gewerbegerichtsgesetz. 2. Aufl. Berlin, F. Vahlen, 1912. 2 v. 25^{cm}.
- 843 ——— The following laws relate to the employment of children and are published in the Reichsgesetzblatt as follows:
- | | |
|-------------------------|------------------------|
| March 30, 1903, p. 113. | Nov. 25, 1909, p. 968. |
| Feb. 17, 1904, p. 62. | Dec. 8, 1909, p. 969. |
| June 18, 1905, p. 548. | Nov. 24, 1911, p. 958. |
| Feb. 17, 1907, p. 36. | Dec. 20, 1911, p. 976. |
| Feb. 21, 1907, p. 65. | May 20, 1912, p. 311. |
| May 16, 1907, p. 235. | Dec. 13, 1912, p. 565. |
| July 1, 1907, p. 404. | March 7, 1913, p. 125. |
| Dec. 28, 1908, p. 667. | March 9, 1913, p. 129. |
| May 21, 1909, p. 471. | Dec. 8, 1913, p. 777. |
| July 3, 1909, p. 546. | Nov. 11, 1914, p. 474. |
- Prepared by the Leg. Ref. Div
- 844 ——— **Statistisches Amt.** Statistisches Jahrbuch für das Deutsche Reich. 1914. Berlin, Puttkammer & Mühlbrecht, 1914. 472, 138* p. 24^{cm}. HA1232.A3 1914
Die in den Jahren 1911 und 1912 im Deutschen Reich in Betrieben mit mindestens 10 Arbeitern und in den diesen gleichgestellten Betrieben beschäftigten Arbeiter (erwachsene und jugendliche beiderlei Geschlechts): p. 64-65.

- 845 **Gesellschaft für Soziale Reform, Berlin.** Die jugendlichen Arbeiter in Deutschland. I-VI. Jena, G. Fischer, 1910-12. 6 v. 21½^{cm}. (Schriften der Gesellschaft für Soziale Reform. iv. Bd., Hft. 1-7; Hft. 34-40 der ganzen Reihe) HD6250.G3G4
- CONTENTS:
 I. Arbeitsverhältnisse der den §§135-139^a der Gewerbeordnung unterstellten minderjährigen Arbeiter. Von Dr. Karl Bittman. 1910.
 II. Kriminalität und sittliches Verhalten der Jugendlichen. Von Dr. Paul Köhne. 1910.
 III. Schädigung von Leben und Gesundheit der Jugendliche. Von Dr. J. Kaup. 1911.
 IV. Bildung und Erziehung ausserhalb der Schule (Jugendpflege) Von Hans Weickert. 1911.
 V. Verhandlungen der 5. Generalversammlung der Gesellschaft für Soziale Reform am 12. u. 13. Mai 1911 in Berlin. 1911.
 VI. Die Fortbildungsschule. Von Dr. Alfred Kühne. 1912.
- 846 **Görres, Karl** Handbuch der gesamten Arbeitergesetzgebung des Deutschen Reiches. Freiburg im Breisgau: Herder'sche verlagshandlung; St. Louis, Mo. [etc.] B. Herder, 1893. xxxv, [i], 765 pp. 8°. HD7888.G7
 Jugendliche Arbeiter: p. 114, 295, 579, 619, 637-645, 647-652.
- 847 **Juvenile labor in Germany.** Economic review, Jan. 1913, v. 23: 14-23. HB1.E4,v.23
- 848 **Die Kinderarbeit in gewerblichen Betrieben.** Arbeiterwohl, July-Dec. 1903, v. 23: 193-209. HD4809.S7,v.23
- 849 **Lesser, Ernest.** Juvenile labour in Germany. Economic review, Jan. 1913, v. 23: 14-23. HB1.E4,v.23
- 850 **London. County council. Education committee.** Report by education officer submitting a report by Miss Durham . . . on juvenile labour in Germany and how it is being dealt with. [London, Printed for the London county council by Southwood, Smith & co., ltd.] 1910. cover-title, 14 p. 33^{cm}. HD6250.G4L7
 Reviewed by N. B. Dearn, Economic Journal, Dec. 1910, v. 20: 652-655. HB1.E3,v.20
- 851 **Lord, E. W.** State industrial supervision of children in Germany and in Connecticut. (In Child labor conference. Hartford, Conn., 1908. Report of the proceedings . . . [Hartford] 1909. 22^{cm}. p. 16-18.) HD6250.U4C8 1908
- 852 **Muench, Hugo.** Employment of children in Germany. (In United States. Consular reports, v. 75, no. 283, Apr. 1904, p. 121-124) HC1.R2,v.75
- 853 **Nitsky, Walther.** Die Entwicklung des gesetzlichen Schutzes der gewerblich tätigen Kinder und jugendlichen Arbeiter in Deutschland. (Unter besonderer Berücksichtigung des Kinderschutzgesetzes vom 30. März 1903.) . . . Borna-Leipzig, Buchdr. R. Noske, 1905. vi, 130 p. 23^{cm}. HD6243.G3N5
 "Literaturverzeichnis": p. [128]-130.
- 854 **Pieper, August, and Helene Simon.** Die Herabsetzung der Arbeitszeit für Frauen und die Erhöhung des Schutzesalters für jugendliche Arbeiter in Fabriken. Jena, G. Fischer, 1902. 164 p. 21½^{cm}. (Schriften der Gesellschaft für Soziale Reform. hft. 7-8) HD6064.P4
- 855 **Prelle de la Nieppe, E. de.** Rapport sur le projet de réglementation en Allemagne du travail des enfants dans les industries autres que les fabriques et usines. (In Belgium. Ministère des affaires étrangères. Recueil des rapports des secrétaires de légation de Belgique. Bruxelles, 1905. v. 12, p. 91-100) HC5.B5,v.12
- 856 **Rühle, Otto.** Das proletarische Kind, eine Monographie. München, A. Langen [1911] xiv p., 11., 262 p., 11. 19^{cm}. HD4853.R8
 Die Barbarei der Kinderarbeit: p. 130-161.
- 857 **Schultze.** Das Kinderschutzgesetz in der Praxis. Soziale Praxis, May 23, 30, 1912, v. 21: 1067-1063; 1090-1094. H5.S7,v.21

- 858 **Spangenberg, Hans.** Reichsgesetz, betreffend Kinderarbeit in gewerblichen Betrieben. Vom 30. März 1903. Berlin, J. Guttentag, 1903. 148 p. 13^{cm}. (Guttentag'sche Sammlung deutscher Reichsgesetze, Nr. 71.)
- 859 **Stieda, W.** Child laborers and their protection in Germany. Chautauquan, Oct. 1893, v. 18: 88-91. AP2.C48,v.18
- 860 **Veditz, Charles William August.** Child-labor legislation in Germany. (In U. S. Bureau of labor. Bulletin, July, 1910, no. 89. Washington, 1910. p. 231-312) HD8051.A5,no.89

GREAT BRITAIN.

- 861 **Adler, Nettie.** Child workers and wage-earners. Royal society of arts, Journal, June 12, 1908, v. 56: 738-747. T1.S64,v.56
- 862 ——— Children as wage-earners. Fortnightly review, May 1, 1907, v. 73: 918-927. AP4.F7,v.73
- 863 **Alden, Mrs. Margaret (Pearse)** Child life and labour. 3d ed. rev. London, Headley brothers [1913] 4 p. l., 191 p. diagr. 17^{cm}. (Social service handbooks, no. 6) HQ751.A6
"Bibliography on child life. Compiled for the author by the British Institute of social service": p. 172-184.
- 864 ——— Women and children and the labour market.. (In An Encyclopaedia of industrialism. London, T. Nelson and sons [1914?] p. 516-532.) HD2321.E6
Bibliography: Child labour: p. 529-532.
- 865 **Baggallay, F. W.** Child labour in factories and workshops. Economic review, July 15, 1909, v. 19: 293-308. HB1.E4,v.19
- 866 **Die Beschäftigung jugendlicher Personen im Dienste der britischen Postverwaltung.** Deutsche Verkehrs-Zeitung, Dec. 8, 1911, v. 35: 531-533. HE6007.D5,v.35
- 867 **Black, Clementina.** Sweated industry and the minimum wage. London, Duckworth & co., 1907. xxiv, 281 p., 1 l. 19^{cm}. HD2339.G7B7
Wage-earning children: p. 104-131.
- 868 **Bloomfield, Meyer.** The school and the start in life; a study of the relation between school and employment in England, Scotland, and Germany. Washington, Govt. print. off., 1914. 143 p. 23^{cm}. (U. S. Bureau of education. Bulletin, 1914, no. 4. Whole no. 575) HF5381.B5
Bibliography: p. 133-142.
- 869 **Bosanquet, Helen, "Mrs. Bernard Bosanquet".** Little drudges and troublesome boys. (In her The standard of life and other studies. London, 1898. 20^{cm}. p. 174-182) HN389.B78
- 870 ——— The strength of the people; a study in social economics. London, New York, Macmillan and co., limited, 1902. xii, 345, [1] p. 23^{cm}. HN309.B8
The children: p. 211-228.
- 871 **Bray, Reginald Arthur.** Boy labour and apprenticeship. 2d impression. London, Constable & co., 1912. xi, 248 p. 19^{cm}.
"List of authorities": p. 241-244.
- 872 ——— The town child. London, T. F. Unwin, 1907. viii, 333, [1] p. 22^{cm}. HT206.B7
Minimum wage, 85-92; Entrance to a trade, p. 182-203.
- 873 **British association for labour legislation.** Child labour in the United Kingdom. A study of the development and administration of the law relating to the employment of children. By Frederic Keeling. Prepared on behalf of the British section of the International association for labour legislation. London, P. S. King & son, 1914. xxxii, 326 p. 25^{cm}. HD6250.G7B75
"Bibliography of the employment of children in the United Kingdom": p. [309]-319.
Reviewed in Political science quarterly, Mar. 1915, v. 30: 151-153. H1.P8,v.30

- 874 **British association for labour legislation.** Report on the employment of children in the United Kingdom. By Constance Smith (co-hon. sec. of the Committee on wage-earning children). 2d ed. London, Issued by the British association for labour legislation [pref. 1909] 32 p. 21½^m. HD6250.G7B8
- 875 **Buckmaster, Stanley Owen.** Employment of children act, 1903. Report to His Majesty's principal secretary of state for the Home department, on the byelaws made on the 29th of January, 1910, by the London County council under the Employment of children act, 1903. Presented to Parliament by command of his Majesty. London, Pub. by H. M. Stationery off., printed by Darling and son, limited, 1911. 18 p. 33^m. ([Gt. Brit. Parliament. Papers by command] Cd. 5497) HD6250.G7A4 1911
Found also in Gt. Brit. Parliament. *Sessional papers*, 1911, v. 64. J301.K6 1911,v.64
- 876 **Chamberlain, Norman.** Labour exchanges and boy labour. *Economic review*, Oct. 15, 1909, v. 19: 400-409. HB1.E4,v.19
- 877 **Child labour:** i. Minimum age for labour of children, by Henry Edward, Cardinal Manning. ii. The half-timers, by Henry Duncckley. *Contemporary review*, June, 1891, v. 59: 794-802. AP4.C7,v.59
- 878 **Clark, Victor S.** Woman and child wage-earners in Great Britain. (*In* U. S. Bureau of labor. Bulletin, no. 80, Jan., 1909, p. 1-85. Washington, 1909. 23^m.) HD8051.A5,no.80
- 879 **Clarke, Allen.** The effects of the factory system. Written 1895-6; rev. 1897-8. London, G. Richards, 1899. 2 p. l., vii-viii, 178 p. 17½^m. HD2356.G7C6
Effects of the factory system on children: p. 92-118.
- 880 **Collet, Clara Elizabeth.** Report by Miss Collet on the statistics of employment of women and girls. Presented to both houses of Parliament by command of Her Majesty. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, 1894. vii, 152 p. incl. tables. 25^m. ([Gt. Brit. Parliament. Papers by command] C. 7564) HD6136.C7
Found also in Gt. Brit. Parliament. *Sessional papers*, 1894, v. 81, pt. 2. J301.K6 1894,v.81
- 881 **Committee on wage-earning children.** London. Report. A statement of the existing laws for their protection, with suggestions of possible amendments. [London, G. Reynolds, printer], 1900. 12 p. 23^m. HD6243.G8C7
- 882 ——— 11th-12th annual report . . . 1911-1912. London, 1911-1912. 2 v. 21½^m.
- 883 **Condy, George.** An argument for placing factory children within the pale of the law. London, Longman, Rees, Orme, Brown, Green & Longman; [etc., etc.] 1833. 60 p. 20½^m. HD6243.G8C75
- 884 **Cox, Irene.** Factory laws affecting women and children. *Charity organization review*, Feb. 1914, n. s. v. 35: 70-79. HV1.C6,n.s.v.35
- 885 **Cranston, Mary Rankin.** Child wage-earners in England: why the "half-time" system has failed to solve the problem. *Craftsman*, July, 1907, v. 12: 424-430. N1.C87,v.12
- 886 **Cunningham, William.** The growth of English industry and commerce. Cambridge, University press, 1896-1903. 3 v. 23^m. HC253.C'96
[v. 3.] Modern times: Pt. 2. *Laissez faire*.
"Conditions of children's work": p. 775-790. See also Index: p. 1005.
- 887 **Dewar, David.** The Children act, 1908, and other acts affecting children in the United Kingdom. Edinburgh and London, W. Green & sons, 1910. vii, 418 p. 22^m. HV761.A4 1910
- 888 **Drage, Geoffrey.** The labour problem. London, Smith, Elder & co., 1896. xv, 424 p. 23^m. HD8390.D8
The employment of children: 1. The present law with regard to the employment of children, p. 246-261; The lines of suggested reform: p. 261-269.

- 889 **Dunlop, Olive Jocelyn.** English apprenticeship & child labour; a history with a supplementary section on the modern problem of juvenile labour, by O. Jocelyn Dunlop and Richard D. Denman. London [etc.] T. F. Unwin, 1912. 3 p.l., 9-390 p., 1 l. 23^{cm}. HD4885.G7D8
Bibliography: p. 355-363.
- 890 **Freeman, Arnold.** Boy life & labour; the manufacture of inefficiency. Preface by Dr. M. E. Sadler . . . London, P. S. King & son, 1914. xiii p., 1 l., 252 p. 22^{cm}. HD6250.G75B5
"Bibliography of juvenile labour": p. 233-248.
Reviewed in American economic review, Dec. 1914, v. 4: 921-922. HB1.E26,v.4
- 891 **Garnett, William Hubert Stuart.** Children and the law . . . with an introduction by the Rt. Hon. Walter Runciman, London, J. Murray, 1911. xiv (i. e. 24), 255 p. 19½^{cm}. HV731.G7G3
Appendixes: I. Bye-laws. II. County of London. Employment of children and street-trading by young persons. By-laws.
- 892 **Gaskell, P.** Artisans and machinery: the moral and physical condition of the manufacturing population considered with reference to mechanical substitutes for human labour. London, J. W. Parker, 1836. xv, 399, [1] p. 17^{cm}. HD2356.G7G4
Pub. also under title: The manufacturing population of England.
Infant labour, p. 135-173; Education, p. 239-253.
- 893 **Golf and the caddie question.** English review, July, 1914, v. 17: 531-539. AP4.E523,v.17
- 894 **Gordon, Mrs. Maria Mathilda (Ogilvie).** Juvenile employment bureaux. Women's industrial news, no. 56, Jan. 1912, p. 1-11.
- 895 **Gt. Brit. Board of education.** Correspondence relating to school attendance between the Board of education and certain local education authorities since the outbreak of the war . . . London, H. M. Stationery off., Eyre & Spottis] woode, 1915. 19p. 33½^{cm}. ([Gt. Brit. Parliament. Papers by command-] Cd. 7803)
- 896 — **Board of trade.** Abstract of labour statistics, 1912-13. London, Printed for H. M. Stationery off., by Harrison and sons, 1915. xxii, 348 p. 24^{cm}. [Parliament. Papers by command] HD8381.A2 1912-13
Occupations of children under 14 years of age: p. 318-319.
- 897 — **Census office.** Census of England and Wales. 1911. Vol. X. Occupations and industries. London, Pub. by H. M. Stationery off., printed by Harrison and sons, 1914. 2 v. tables. 33^{cm}. ([Parliament. Papers by command] Cd. 7018, 7019) HA1121.1911.C,v.10
Contains statistics of children from 10 years of age upwards, see especially Grouped occupations of children, pt. 1, p. 462-467.
- 898 — **Children's employment commission.** First report of the commissioners. Mines. Appendix, part 1-2. Reports and evidence from sub-commissioners. Presented to both houses of Parliament by command of Her Majesty. 1842. 4 v. 33^{cm}. (Gt. Brit. Parliament. Sessional papers, 1842, v. 15, 16, 17.) J301.K6 1842,v.15-17
Second report. Trades and manufactures. Appendix and index to second report. Presented to both Houses of Parliament by command of Her Majesty. 1843-1845. 4 v. Folded map. 33^{cm}. (Gt. Brit. Parliament. Sessional papers, 1843, v. 13, 14, 15; 1845, v. 42.) J301.K6 1843,v.13-15; 1845,v.42
Reviewed in Christian remembrancer, May, 1843, v. 5: p. 674-704.
Edinburgh review, Jan. 1844, v. 79: 130-156. AP4.E3,v.79

- 899 **Gt. Brit. Children's employment commission (1862).** First-[sixth] report, with appendix. 1863-1867. 6 v. 33^{cm}. J301.K6
 First report in Gt. Brit. Parliament. Sessional papers, 1863, v. 18.
 Second report, *Same.* 1864, v. 22.
 Third report, *Same.* 1864, v. 22.
 Fourth report, *Same.* 1865, v. 20.
 Fifth report, *Same.* 1866, v. 24.
 Sixth report, *Same.* 1867, v. 67.
 V. 1, p. 325-336, contains "Laws and regulations of foreign countries respecting the labour and education of children and young persons employed in trades and manufactures."
 Reviewed in *Meliora*, 1864, v. 6: 224-250; 1865, v. 8: 102-120. *Christian remembrancer*, Apr. 1865, v. 49: 332-356. *Quarterly review*, Apr. 1866, v. 119: 364-393.
 See also article by H. S. Trevelyan in *National association for the promotion of social science. Transactions*, Oct. 1865, p. 201-301. H11.N2 1865
- 900 ——— **Factories inquiry commission.** First [second and supplementary] report of the Central board, . . . as to the employment of children in factories and as to the propriety and means of curtailing the hours of their labour; with minutes of evidence and reports by the District [and medical] commissioners. Ordered, by the House of Commons, to be printed, 28 June, 1833 [15 July, 1833, 25 March, 1834]. 5 v. 33^{cm}. HD6250.G67 1833
 Also found in Great Britain. Parliament. Sessional papers. First report, 1833, v. 20, pt. 1.
 Second report, *Same.* 1833, v. 21.
 Supplementary report, *Same.* 1834, v. 19, 20, pt. 1-2. JK301.K6 1833, v. 20, 21 1834, v. 19, 20
- 901 ——— **Foreign office.** Correspondence respecting the introduction into and employment in this country of Italian children. Presented to both houses of Parliament by command of Her Majesty. 1877. London, Harrison and sons, [1877] 5 p. 33^{cm}. (Parliament. Sessional papers, 1877, v. 88. C. 1764.) J301.K6 1877, v. 88
- 902 ——— **Home dept.** Form no. 39. Factory and workshop acts, 1901 to 1911. Form prescribed by the Secretary of state for certificates of school attendance. London, 1912. Authorized ed. HD6250.G67 1912
 The L. of C. has many other editions.
- 903 ——— **Employment of children act, 1903.** Report to His Majesty's principal secretary of state for the Home department on the byelaws made by the London County council under the Employment of children act, 1903, by Chester Jones. Presented to both houses of Parliament by command of His Majesty. London, Printed for H. M. Stationery off., by Darling & son, ltd., 1906. 28 p. 32½^{cm}. ([Parliament. Papers by command] Cd. 2809) HD6243.G8A5 1906
 Also found in Gt. Brit. Parliament. Sessional papers, 1906, v. 90. J301.K6 1906, v. 90
- 904 ——— **Factory and workshop orders.** (1914 ed.) London, Printed for H. M. Stationery off., by Darling & son, ltd., 1914. (8), 220 p. 24½^{cm}. HD7875.A4 1914
- 905 ——— **Factories and workshops.** Summary of returns under S. 130 of the Factory and workshop act, 1901, of persons employed in 1907 in textile factories [and in non-textile factories, and in workshops] (including statistics of marriage-state of women over 18) . . . London, Printed for H. M. Stationery off., by Darling & son, ltd., 1909-11. 3 v. in 1. 33^{cm}. ([Parliament. Papers by command] Cd. 4692, 5398, 5883) HD6381.A5 1907
- 906 ——— **Form no. 71, Oct. 1908.** Factory and workshop act, 1901. Pt. II of the General register, being the prescribed form of register of young persons (under 18 years of age) employed full time, and certificates of fitness for employment, in case of those under 16 years of age. Authorized ed. London, 1908. HD3705.A4, no. 71

- 07 **Gt. Brit. Home dept. Committee on Employment of children act, 1903.** Report of the Departmental committee on the Employment of children act, 1903, appointed by His Majesty's principal secretary of state for the Home department [and Minutes of evidence . . . with appendices and index] Presented to both houses of Parliament by command of His Majesty. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, Ltd. [1910] 2 v. in 1. 33^{cm}. ([Parliament. Papers by command] Cds. 5229, 5230) HD6250.G7A4 1910
- 908 **Committee on employment of school children.** Report of the inter-departmental Committee on the employment of school children, appointed by H. M. principal secretary of state for the Home department . . . [and Minutes of evidence . . . with appendices and index . . .] London, Printed for H. M. Stationery off., by Wyman and sons, limited, 1901-02. 2 v. in 1. fold diagr. 33^{cm}. ([Gt. Brit. Parliament. Papers by command] Cd. 849, 895) HD6250.G7A4 1901
Also found in Gt. Brit. Parliament. Sessional papers, 1902, v. 25.) J301.K6 1902,v.25
- 909 **Night work committee.** Report of the departmental committee on the night employment of male young persons in factories and workshops. Minutes of evidence and appendices. London, Pub. by H. M. Stationery off., printed by Eyre and Spottiswoode, Ltd., 1912-1913. 2 v. in 1. 33^{cm}. ([Parliament. Papers by command] Cd. 6503, 6711) HD5113.G7
Found also in Gt. Brit. Parliament. Sessional papers, 1912-13, v. 26; 1913, v. 23 J301.K6
- 910 **Van boys and warehouse boys committee.** Report of the departmental committee on the hours and conditions of employment of van boys and warehouse boys, appointed by His Majesty's principal secretary of state for the Home department [with Minutes of evidence] . . . London, Pub. by H. M. Stationery off., printed by Eyre and Spottiswoode, Ltd., 1913. 2 v. in 1. 33^{cm}. ([Parliament. Papers by command] Cd. 6886-6887) HD6250.G7A4 1913
- 911 **Inter-departmental committee on partial exemption from school attendance.** Report of the Inter-departmental committee on partial exemption from school attendance . . . Presented to both houses of Parliament by command of His Majesty. London, Printed for H. M. Stationery off., by J. Truscott & son, Ltd., 1909. 2 v. in 1. tables. 33^{cm}. ([Parliament. Papers by command] Cd. 4791, 4887) HD6250.G7A4 1909
- 912 **Laws, statutes, etc.** The following laws relate to the employment of children:
Factory and workshop act, 1891, 54 and 55 Vict. c. 75; 1895, 58 and 59 Vict. c. 37; 1901, 1 Edw. VII c. 22; 1907, 7 Edw. VII c. 39.
Prohibition of Child labor underground act, 1900, 63 and 64 Vict. c. 21.
Employment of Children act, 1903, 3 Edw. VII c. 45.
Prevention of Cruelty to children act, 1904, 4 Edw. VII c. 15.
Children act, 1908, 8 Edw. VII c. 67.
Dangerous performances act, 1907, 60 and 61, Vict. c. 52.
Children (Employment abroad) act 1913. 3 and 4 Geo. V, c. 7.
Prepared by the Leg. Ref. Div.
- 913 **Children.** A bill to provide for the more effectual treatment and prevention of destitution and sickness among children, and to regulate the hours and conditions of labour among children. March 25, 1914. London, Eyre and Spottiswoode, 1914. 12 p. 33^{cm}. ([Parliament, 1914. H. of C. Bills] Bill 142.)
- 914 **Children (employment and school attendance).** A bill to amend the law in respect of the employment of children and their attendance at school. Feb. 13, 1914. London, Eyre and Spottiswoode, 1914. 6 p. 33^{cm}. ([Parliament, 1914. H. of C. Bills] Bill 11.)

- 915 **Gt. Brit. Parliament. House of commons. Select committee on the state of children employed in the manufactories of the United Kingdom. Report of the minutes of evidence. (*In Great Britain. Parliament. Sessional papers, 1816, v. 3.*)** J301.K6 1816.v.3
- 916 **Committee on employment of boys in sweeping of chimnies. Report, together with the minutes of evidence taken before the Committee and an appendix. Ordered by the House of Commons, to be printed, 23 June 1817. 51 p. 33^{cm}. (Gr. Brit. Parliament. Sessional papers, 1817, v. 6, 400)** J301.K6 1817.v.6
- 917 **Committee appointed to examine the several petitions . . . against the employment of boys in sweeping of chimneys. A copy of the report presented to the House of commons by the Committee appointed to examine the several petitions, which have been presented to the House, against the employment of boys in sweeping of chimneys. The Pamphleteer. London, 1817. 22 $\frac{1}{2}$ ^{cm}. v. 10, p. [483]-491. AP4.P2,v.10**
- 918 **Committee on Bill to regulate labour of children in mills and factories. Report; with the minutes of evidence, appendix and index. Ordered, by the House of commons, to be printed, 8 August 1832. [London, 1832] 682 p. 33^{cm}. ([Parliament, 1832. H. of C. Reports and papers] 706)** HD6250.G67 1832
Also found in Gt. Brit. Parliament. Sessional papers, 1831-32, v. 15. 708.
J301.K6 1831-32,v.15
- 919 **Select committee on the act [to regulate the labour of children and young persons in] mills and factories. First-[sixth] report, together with the minutes of evidence taken before them, appendices, and index. Ordered, by the House of commons, to be printed 3 April, 1840-17 July, 1840. 6 pts. Facsimiles. 33^{cm}. (Gt. Brit. Parliament. Sessional papers, 1840, v. 10)** J301.K6 1840,v.10
Report. Ordered, by the House of Commons, to be printed 18 February, 1841. vi, 33 p. 33^{cm}. (Gt. Brit. Parliament. Sessional papers, 1841, v. 9) J301.K6 1841,v.9
- 920 **Standing committee on bills, A. Report on the (Children (employment and school attendance) bill with the proceedings of the committee. Ordered, by the House of commons to be printed, 16th April, 1914. London, J. B. Nichols and sons, 1914. 13 p. 33^{cm}. (Reports and papers. 1914. 190.)**
- 921 **Post office. Standing committee on boy labour. Report[s] of Standing committee on boy labour in the Post office, together with instructions issued by the postmaster general in connection therewith. London, Pub. by H. M. Stationery off., printed by Eyre and Spottiswoode, ltd., 1911-15. 5 v. 32 $\frac{1}{2}$ ^{cm}. ([Parliament. Papers by command] Cd. 5504, 5755, 6959, 7556, 8019.)** HE6939.E5A4 1912 1912a
- 922 **Royal commission on labour. Report[s], [minutes of evidence, indexes, answers to questions] London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, 1892-94. 35 v. in 14. tables, diagrs. 33^{cm}. [Parliament. Papers by command]** HD8381.C3 1892
Contains much valuable information on child labor in the various industries. Consult the Indexes under Apprentices, Boy labour, Child labour, etc.
- 923 **Royal commission on poor laws and relief of distress. Report by Mr. Cyril Jackson on boy labour together with a memorandum from the general post-office on the conditions of employment of telegraph messengers . . . London, printed for H. M. Stationery off., by Wyman & sons, 1909. 230 p. 33 $\frac{1}{2}$ ^{cm}. ([Gt. Brit. Parliament. Papers by command] Cd. 4632)** HD6250.G7A4 1909a
Appendix v. 20 to reports of the Poor law commission.

- 924 Greenwood, Arthur.** Juvenile labour exchanges and after-care. With an introduction by Sidney Webb. London, P. S. King & son, 1911. xi, 112 p. 21½^{cm}.
HD6250.G7G7
Bibliography: p. [101]-112.
- 925 ———** Juvenile labour problems. *Child*, Oct. 1911, v. 2: 25-34.
HQ750.A2C4,v.2
- 926 ———** Next steps in factory and workshop reform. *Political quarterly*, Sept. 1914, no. 3: 38-70.
Short bibliography on the factory acts, p. 69-70.
- 927 ——— and John E. Kettlewell.** Some statistics of juvenile employment and unemployment. Royal statistical society. *Journal*, June, 1912, v. 75: 744-753.
HA1.R8,v.75
- 928 Hall, William Clarke.** The Queen's reign for children; with an introduction by Benjamin Waugh. London, T. F. Unwin, 1897. xvi, 208 p. front. (port.) 19½^{cm}.
HV751.A6H2
CONTENTS.—I. The employer and the child.—II. The state and the child.—III. The parent and the child.—Appendices: A. Cases of cruelty. B. Chronological table of statutes.
- 929 Halsey, O. S.** Directing the work life of English children. *Survey*, May 16, 1914, v. 32: 195-196.
HV1.C4,v.32
- 930 Hanway, Jonas.** A sentimental history of chimney-sweepers, in London & Westminster. Shewing the necessity of putting them under regulations to prevent the grossest inhumanity to the climbing boys. With a letter to a London clergyman, on Sunday schools calculated for the preservation of the children of the poor. London, Dodsley [etc.] 1785. 1 p. l., xl, 191 p. front., pl. 16½^{cm}.
HV887.G7L87
- 931 Harvey, E. C.** Labour laws for women and children in the United Kingdom. [London] The Women's industrial council, 1909. cover-title, 24 p. 21^{cm}.
HD6083.G8H2
Bibliography: p. 23-24.
- 932 Harwood, W.** Child labour. *Child*, Nov. 1912, v. 3: 131-133.
HQ750.A2C4,v.3
- 933 Hoffman, Frederick Ludwig.** Industrial accident statistics . . . March, 1915. Washington, Govt. print. off., 1915. 210 p. 23^{cm}. (Bulletin of the United States Bureau of labor statistics, whole no. 157. Industrial accidents and hygiene series, no. 5)
HD8051.A62,no.157
Children and young persons, killed or disabled, United Kingdom, 1906-1913: p. 166-167.
- 934 Holland, Robert W.** The law relating to the child, its protection, education, and employment. London, Pitman, 1914. xxiv, 142 p. 22^{cm}.
- 935 Hutchins, Miss B. Leigh, and Amy H. Spencer.** A history of factory legislation. With a preface by Sidney Webb. 2d ed. rev., with a new chapter. London, P. S. King & son, 1911. xvi, 298 p. 22^{cm}. (Studies in economics and political science. Ed. by . . . W. P. Reeves . . . no. 10 in the series of monographs by writers connected with the London school of economics and political science)
HD7876.H92
Appendices: A. Orders in council: p. [273]-278. B. Select bibliography: p. [279]-284.
Children's labour in the 18th century, p. 3-13; Cotton mills before 1831, p. 19, 22, 26, 31, 37, 41; Education of factory children, p. 76-81; Children's employment commission, p. 150-157, 170-172.
- 936 Independent labour party.** London branch. Commercialism and child labour. An indictment and some remedies. London, City branch, Independent labour party, 1900. 16 p. 22½x11½^{cm}. (City branch pamphlets, no. 4)
HD6250.G714
- 937 Jackson, Cyril.** Unemployment and trade unions; with a preface by Rt. Hon. Viscount Milner. London, New York [etc.] Longmans, Green, and co., 1910. xiii, 92 p. 19½^{cm}.
HD5767.J2
Boy labour, p. 55-67.

- 938 **Jevons, H. W.** Industrial prospects for boys and girls. *Charity organisation review*, Sept. 1906, n. s. v. 20: 125-138. HV1.C6,n.s.v.20
Bibliography: p. 139.
- 939 **Keeling, Frederic.** The present position of child labour regulation. *Women's industrial news*, no. 66, July, 1914, p. 259-267.
- 940 **Kittermaster, D. B.** Unemployment and boy labour. *Saint George*, Jan. 1907, v. 10: 1-10. HN381.S2,v.10
- 941 **[Kydd, Samuel]** The history of the factory movement, from the year 1802 to the enactment of the ten hours' bill in 1847. By Alfred [psud.] London, Simpkin, Marshall, and co., 1857. 2 v. 22^{cm}. HD2356.G7K4
- 942 **The Labour year book.** [v. 1] 1916. Issued under the auspices of the Parliamentary committee of the Trades union congress, the Executive committee of the Labour party, the Fabian research department . . . London [etc.] Co-operative printing society limited [1916?] 704 p. 19^{cm}. HD8385.L3
Child labour and the factory acts: p. 86-91.
Child and juvenile labour and apprenticeship: p. 279-302.
- 943 **Leeds, Eng. Education committee.** Employment of children. Report on children attending school full time and working out of school hours. [n. p., 1910] 7 p. 24^{cm}.
- 944 **Lightbody, W. M.** The problem of unskilled labour. *Economic review*, Oct. 15, 1909, v. 19: 423-431. HB1.E4,v.19
- 945 **Lovejoy, Owen B.** Child labor legislation in England. *Chautauquan*, Apr. 1907, v. 46: 217-225. AP2.C48,v.46
- 946 **McMillan, Margaret.** Child labour. (*In* Oliver, Sir Thomas, ed. *Dangerous trades*. London, J. Murray, 1902. p. 91-97) HD7262.O5
- 947 **Minton-Senhouse, Robert Metcalfe.** Work and labour: being a compendium of the law affecting the conditions under which the manual work of the working classes is performed in England. London, Sweet & Maxwell, ld., 1904. xeviii, 379 p. 25½^{cm}. HD7875.M5
See Index under Child.
- 948 **Moulder, Priscilla E.** Factory girls' life in England. *World's work* (London) Oct. 1910, v. 16: 469-472. AP4.W85,v.16
- 949 **Mundella, A. J.** The fight for the child. *Review of reviews*, London, Mar. 1915, v. 51: 207-209. AP4.R4,v.51
- 950 **Die Nachtarbeit von Knaben in Fabriken und Werkstätten in Grossbritannien.** Germany. Statistisches Amt. Abteilung für Arbeiterstatistik. *Reichs-Arbeitsblatt*, Sept. 1913, v. 11: 687-689. HD8441.A3,v.11
- 951 **National conference on the prevention of destitution.** 1st, London, 1911. Report of the proceedings of the National conference on the prevention of destitution, held at the Caxton hall, Westminster, on May 30th and 31st, and June 1st and 2nd, 1911, president: the Rt. Hon. the Lord Mayor of London. London, P. S. King & son, 1911. xxvi, 766 p. incl. tables, diagrs. 25½^{cm}. HV244.N3 1911
The public organisation and control of juvenile employment: *Juvenile employment: the Edinburgh method of co-operation between the education authorities and the labour exchange*, by J. W. Peck: p. 219-237; *Working of the London juvenile advisory committee*, by R. D. Dorman: p. 238-246; *The limitation of juvenile labour*, by N. Adler: p. 247-253; *The social organisation of adolescence*, by Mrs. Ogilvie Gordon: p. 253-264; *Discussion*: p. 265-272.
- 952 ——— 2d, London, 1912. Report of the proceedings of the unemployment & industrial regulation section . . . London, P. S. King & son, 1912. 147 p., 1 l. 24½^{cm}. HD8384.N3
The care and training of juvenile workers. Papers by R. A. Bray, W. Main, R. H. Tawney. Miss C. Smith, and A. Greenwood: p. 78-112. Discussion: p. 113-118.

- 953 **Pelham, Herbert Sidney.** The training of a working boy. London, Macmillan and co., limited, 1914. xv, 165 p. front., plates. 19^{cm}. HQ775.P4
Child employment: p. 55-68; Boy labour: p. 69-86.
- 954 **Pope, Samuel.** Employment of children act, 1903. Report to His Majesty's principal secretary of state for the Home department on the byelaw made by the Devon County council under the Employment of children act, 1903, and on the objections thereto. London, H. M. Stationery off., by Darling and son, ltd., 1913. 15 p. 33^{cm}. ([Gt. Brit. Parliament. Papers by command] Cd. 6988) HD6250.G73A5 1913
"Byelaw as recommended for approval": p. 15.
Also found in Gt. Brit. Parliament. Sessional papers, 1913, v. 23. J301.K6 1913,v.23
- 955 **Porter, George Richardson.** The progress of the nation in its various social and economic relations from the beginning of the nineteenth century. A completely new ed., rev. and brought up to date by F. W. Hirst . . . London, Methuen & co. ltd. [1912] xvi p., 1 l., 735, [1] p. incl. tables. 23^{cm}. HC255.P86 1912
Child labour: occupational statistics: p. 23-28; Effect on unemployment: p. 56; Child labour in agriculture: p. 200; Cotton: p. 302, 315, 318; Silk: p. 347; Wool, p. 327.
- 956 **Rowntree, B. Seebohm and Bruno Lasker.** Unemployment, a social study . . . London, Macmillan and co., limited, 1911. xx, 317 p. tables (partly fold). 23½^{cm}. HD5768.Y6R6
Youths under 19 years of age, p. 1-28.
- 957 **Sandiford, Peter.** The half-time system in the textile trades. (In Sadler, M. E., ed. Continuation schools in England & elsewhere. 2d ed. Manchester, 1908, p. 318-351) LC5215.S25
- 958 **Sherard, Robert Harborough.** The child-slaves of Britain. London, Hurst and Blackett, limited, 1905. 3 p. l., [ix]-xix p., 2 l., 267, [1] p. 8 pl. 21^{cm}. HD6250.G7S4
CONTENTS.—1. On child-slavery in London in general; 2. On child-slavery in London in detail; 3. On the alien immigration and its effects; 4. On child-slavery in Manchester; 5. In Birmingham; 6. In Grimsby; 7. In Scotland; 8. In Liverpool and other large towns; Appendix.
- 959 **Simson, Frau.** Child labour outside the factory laws. (In International congress of women, London, 1899. London, 1900. 20½^{cm}. v. 6, p. 76-81) HQ1106 1899, v.6
- 960 **Smith, A. E. Stanley.** The child and the [English] law. Child, Jan. 1911, v. 1: 363-369. HQ750.A2C4,v.1
- 961 **Tawney, R. H.** "Blind alley" occupations and the way out, an educational policy for the government. Women's industrial news, no. 52, Oct. 1910, p. 1-10.
- 962 ——— The economics of boy labour. Economic journal, Dec. 1909, v. 19: 517-537. HB1.E3,v.19
- 963 **Tuckwell, Gertrude M.** The state and its children. London, Methuen & co., 1894. vi p., 1 l., 164 p. 18½^{cm}. (Social questions of to-day) HV751.A6T8
Canal and van children, p. 90-101; Post office and telegraph boys, p. 151-154; Circus and theatre children, p. 118-126; Half-timers and full-timers, p. 137-157.
- 964 **Urwick, Edward Johns, ed.** Studies of boy life in our cities, written by various authors for the Toynbee trust. London, J. M. Dent & company, 1904. xv, 320 p. 19½^{cm}. HQ775.U83
Cloete, J. G. The boy and his work. I. The general conditions of boy labour. II. Special occupations: messenger-boys, office-boys . . . van-boys, and street traders . . . p. 103-128.
Urwick, E. J. The boy's physique and physical training: The boy's mind and education . . . Home, school, and street, p. 235-318.

- 965 **Webb, Beatrice (Potter) "Mrs. Sidney Webb," ed.** *The case for the factory acts.* London, G. Richards, 1901. xvi, 233 p., 1 l. 194^{cm}. HD7876.W3
Children's labour, p. 76-108, 113-114.
- 966 **Webb, Sidney, and Beatrice Webb.** *Industrial democracy.* London, New York [etc.] Longmans, Green, and co., 1897. 2 v. diagrs. (1 fold.) 224^{cm}.
Bibliography: p. 879-900. HD6664.W4
Boy-labor: v. 2, p. 482-489, 573, 704-715, 766-769, 811.
- 967 **Whitehouse, John Howard, ed.** *Problems of boy life.* London, P. S. King & son, 1912. viii, 342 p. 22^{cm}. HQ797.W5
The economics of boy labour, by R. H. Tawney: p. 17-61; Boy labour: some studies in detail, by Spencer J. Gibb: p. 52-78; Boy labour: towards reform, by Spencer J. Gibb and J. H. Whitehouse: p. 79-98; Boy labour and the factory system, by A. K. Clark Kennedy: p. 97-122.
- 968 **Williamson, Robert.** *Training the "dead-ender".* World's work, London. Mar. 1914, v. 23: 443-446. AP4.W85,v.23
- 969 **Woman in industry from seven points of view,** by Gertrude M. Tuckwell, Constance Smith [and others] . . . with a preface by D. J. Shackleton, M. P. London, Duckworth and co., 1908. xiv, 217 p. 19^{cm}. HD6053.W7
v. Child employment and juvenile delinquency. By Nettie Adler: p. 121-141; vi. Factory and workshop law. By Adelaide M. Anderson: p. 143-181.
- 970 **Wood, George Henry.** *Factory legislation, considered with reference to the wages, &c., of the operatives protected thereby.* Royal statistical society, Journal, June, 1902, v. 65: 284-324. HA1.B3,v.65
- 971 ——— *An outline of the history of the employment of women and children in industry. (In Co-operative wholesale societies limited. Annual, 1904. Glasgow [1904] 8°. p. 209-238)* HD3325.C76 1904
- 972 **The Year-book of social progress . . . 1914-15,** being a summary of recent legislation, official reports, and voluntary effort, with regard to the welfare of the people. London, New York [etc.] T. Nelson and sons [1915] 19^{cm}.
H9.Y5 1914-15
Boy and girl workers (Statistics): p. 26-28; Juvenile labor exchanges: p. 414-416; Boys and the post office: p. 420; Children employment and school attendance: p. 561, 626.
- GREAT BRITAIN: COLONIES.**
- 973 **Edwards, Mrs. Henrietta (Muir)** *Labour laws in Canada that affect women and children.* Women's industrial news, no. 55, Oct. 1911, p. 117-127.
- 974 **France. Direction du travail.** *Législation ouvrière et sociale en Australie et Nouvelle-Zélande.* Mission de M. Albert Métin. Paris, Imprimerie nationale, 1901. vii, 200 p. 24^{cm}. HD7960.F8
Lois pour protéger les femmes et les enfants employés dans l'industrie: p. 77-81; Lois pour protéger les femmes et les enfants employés dans les magasins: p. 81-84.
- 975 **Kelley, Mrs. Florence.** *Child labor in Ontario.* Charities and the Commons, Apr. 27, 1907, v. 18: 116. HV1.C4,v.18
- 976 **New South Wales.** *Royal commission of inquiry into the hours and general conditions of employment of female and juvenile labour in factories and shops.* Report. 1912. lix, 58 p.
- 977 ——— **Statistician's office.** *The official year book of New South Wales.* 1914. [Sydney] W. A. Gullick, 1915. illus., plates, fold. maps. 254^{cm}.
Child labour [With statistics]: p. 357-360, 662. DU150.N5 1913
- 978 **Nova Scotia. Factories inspector.** *Child labor. (In its Report, 1912, p. 24-28)*
- 979 **Ontario. Laws, statutes, etc.** *An act for the protection of persons employed in factories, shops, and office buildings. Assented to 6th May, 1913. International labour office. Bulletin, Aug. 1914, v. 9: 133-157.* HD7801.I6,v.9

- 980 **Page, Anna B.** Labour laws for women and children at home and abroad. *Women's industrial news*, no. 63, Oct. 1913, p. 171-186.
- 981 **Smart, G. Bogue.** Juvenile emigrants in Canada. *Empire review*, June, 1914, v. 27: 310-315. DA10.E4, v. 27
- 982 **Victorian year-book, 1914-15**, by A. M. Laughton . . . government statist. 35th issue. Melbourne, A. J. Mullett, govt. printer [1916?] 912 p. 22^{cm}. Child labour in factories: p. 793. DU200.V6 1914-15

ITALY.

- 983 **Baudoin, Lionel.** La réglementation légale du travail des femmes et des enfants dans l'industrie italienne. Paris, H. Paulin et cie, 1905. 2 p. l., 160 p. 25¹^{cm}. HD6083.I8B2
 "Bibliographie": p. [167]-168.
 CONTENTS.—Texte de la loi du 19 juin 1902.—Introduction.—1. ptie. La loi du 19 juin 1902.—2. ptie. La Convention franco-italienne du 15 avril 1904 et la réglementation légale du travail industriel en France à l'égard des femmes et des enfants italiens.
- 984 **Brants, V.** La législation italienne sur le travail des enfants. Réforme sociale, Mar. 1, 1890, v. 19: 273-282. H3.R3, v. 19
- 985 **Ferraris, Carlo F.** Das neue italienische Gesetz betr. die Frauen- und Kinderarbeit. (*In Archiv für soziale Gesetzgebung und Statistik*, v. 18, p. 564-577. Berlin, 1902. 8°) H5.A8, v. 18
- 986 **Giretti, Edoardo.** La legge sul lavoro . . . forzato delle donne. *Giornale degli economisti*, Oct. 1903, ser. 2, v. 27: 399-401. HB7.G5, 2d, v. 27
 On the Italian law of July 19, 1902, in regard to the labor of women and children.
- 987 **Italy. Laws, statutes, etc.** Royal decree relating to the temporary suspension of the prohibition of night-work for women and children. Dated Aug. 30, 1914. International labor office. Bulletin, 1915, v. 10, nos. 1, 2: 73. HD7801.I6, v. 10
- 988 ——— Uniform text of the Act relating to the employment of women and children, sanctioned by Royal decree no. 818. (Nov. 10, 1907) International labor office. Bulletin, 1907, v. 2, no. 4: 578-582. HD7801.I6, v. 2
- 989 ——— **Ministero di agricoltura, industria e commercio.** Relazione sull' applicazione della legge 11 febbraio 1886, N. 3657 (Serie 3.) sul lavoro dei fanciulli nelle fabbriche e nelle miniere dal 1. luglio 1896 al 31 dicembre 1898. Roma, Tip. della Camera dei deputati, 1901. 51 p. 28^{cm}. (Atti parlamentari. Legis. XXI, Prima sessione 1900-1901. Camera dei deputati, Doc. 24)
 Same. 1 gennaio 1899 al 31 dicembre 1900. Roma, Tip. della Camera dei deputati, 1901. 80 p. 28^{cm}. (Atti parlamentari. Legis. XXI, Prima sessione 1900-1901. Camera dei deputati, Doc. 26) HD6250.I8A4
- 990 ——— Relazione sull' applicazione della legge 19 giugno 1902, N. 242 sul' lavoro delle donne e dei fanciulli (1° luglio 1903-25 luglio 1907) Presentata dal ministro di agricoltura, industria e commercio (Cocco Ortu) nella seduta del 10 luglio 1909. Roma, Tip. della Camera dei deputati, 1909. 208 p. incl. tables. 29^{cm}. HD6152.A5 1909
- 991 ——— **Ufficio del lavoro.** Operai ed orari negli opifici soggetti alla legge sul lavoro delle donne e dei fanciulli (anno 1907) Roma, Officina poligrafica Italiana, 1908. 16, cv p. 313^{cm}. (Pubblicazioni dell' Ufficio del lavoro, Ser. B. n. 21) HD8471.A32, no. 21
 Reviewed by Meerwarth, *in Archiv für Sozialwissenschaft und Sozialpolitik*, Sept. 1909, v. 29: 639-640. H5.A8, v. 29
- 992 **Loriga, Giovanni.** Lavoro dei fanciulli e crescita del corpo. Roma, 1910. (Italy. Pubblicazioni dell' Ufficio del lavoro. Ser. B. n. 26)
 Reviewed in *Rassegna nazionale*, Mar. 1, 1911, v. 178: 127-132. AP37.R2, v. 178

- 993 **Okey, Mrs. Thomas.** Labour laws for women in Italy. [London, The Women's industrial council] 1908. cover-title, 11 p. 21^{cm}. HD6083.I806
- 994 **Ortu, F. Cocco.** Circolare e istruzioni per l'applicazione della legge sul lavoro delle donne e dei fanciulli. Italy. Bollettino dell' Ufficio del lavoro, Nov. 1909, v. 12: 806-821. HD8471.A4,v.12
- 995 **Profumo, L. G.** Le assicurazioni operaie nella legislazione sociale. Torino Fratelli Bocca, editori, 1903. xxi, (1), 402 p. 8°. (Biblioteca di scienze sociali, vol. 43) HD7091.P8
"Le leggi sul lavoro delle donne e dei fanciulli," p. 122-132.
- 996 **Reina, Ettore.** I pubblici spettacoli e le provvidenze di legislazione sociale . . . Roma, L. Cecchini, 1915. 153 p. 31^{cm}. (Pubblicazioni dell' Ufficio del lavoro, serie B, n. 46)
Part I gives the results of an investigation into the employment of children in theatrical performances.
- 997 **Rossi, Alessandro.** Perché una legge? Osservazioni e proposte sul progetto di legge per regolare il lavoro delle donne e dei fanciulli. Firenze, Tip. di G. Barbèra, 1880. ix, 269 p., 1 l. 23^{cm}. HD6083.I8R3
- 998 **Veditz, Charles William August.** Child-labor legislation in Italy. (In U. S. Bureau of labor. Bulletin, July, 1910. no. 89. Washington, 1910. p. 313-326) HD8051.A5,no.89

THE NETHERLANDS.

- 999 **Kramers, Martina G.** Special legislation for children under the factory laws. [Holland] (In International congress of women, London, 1899. London, 1900. 20¹/₂^{cm}. v. 6, p. 66-71) HQ1106 1899,v.6
- 1000 **Netherlands (Kingdom) 1815-** Commissie belast met het onderzoek naar den toestand der kinderen in fabrieken arbeidende. Rapport. Uitgegeven op last van den minister van binnenlandsche zaken . . . 's Gravenhage, Algemeene landsdrukkerij, 1869-72. 4 v. tables (partly fold.) diagrs. (partly fold.) 27¹/₂x23^{cm}. HD6250.N2A4
- 1001 — **Directie van den arbeid.** Onderzoekingen naar de toestanden in de Nederlandsche huisindustrie . . . Uitg. voor rekening van het Departement van landbouw, nijverheid en handel. 's-Gravenhage, Ter Algemeene landsdrukkerij, 1911-14. 3 v. plates. 26¹/₂^{cm}. [Uitgiven no. 7a, 7b, 7c] HD2336.N2A3
CONTENTS.—deel I. Voedings-en genotmiddelen.—deel II. Diamantbewerking. Drukkersbedrijf. Chemische industrie. Hout-en stroobewerking. Metaalbewerking. Papierbewerking. Schoenmakers.—deel 3. Textielindustrie. Kleding en reiniging.
- 1002 — **Laws, statutes, etc.** Text of the labour act, 1911. International labor office. Bulletin, 1912, v. 7, no. 1, 2: 47-91. HD7801.I6,v.7
The following laws relate to the employment of children:
Staatsblad, 1889, No. 48; 1895, No. 138; 1896, No. 259; 1902, No. 185; 1903, No. 107; 1906, No. 97, 204, 243; 1909, No. 244, 290, 1911, No. 319, 352, 353, 355, 356; 1912, No. 282, 283, 284.
Prepared by the Leg. Ref. Div.
- 1003 **Ort, Jan.** Die Beschäftigung jugendlicher Arbeiter in den Niederlanden. Jahrbücher für Nationalökonomie und Statistik, June, 1910, III. Folge, v. 39: 815-817. HB5.J3,3d ser.,v.39

RUSSIA.

- 1004 **The Russian year-book for 1914.** Compiled and edited by Howard P. Kennard, M. D., assisted by Netta Peacock. London, Eyre and Spottiswoode [1914?] 753 p. 20¹/₂^{cm}. HC331.R7 1914
Child labour: p. 622.

- 1005 Schroeter, Jakob.** Zur russischen Fabrikchutzgesetzgebung und ihrer Geschichte. Darmstadt, H. Uhde, 1904. 184 p. 24^{cm}. HD7905.S38
 "Litteraturverzeichnis": p. 177-180.
 "Schutz der jugendlichen Arbeiter," p. 71-82.
- 1006 Schwittau, G.** Russland. Der gesetzliche Schutz der Kinderarbeit. Annalen für soziale Politik und Gesetzgebung, 1913, v. 2: 644-654.
 HD6951.A6,v.2
- 1007 Woycicki, Alexandre.** La protection du travail des femmes et des mineurs dans l'industrie russe. Mouvement social, Jan. 15, 1914, v. 77: 84-87.
 H3.M6,v.77

NORWAY AND SWEDEN.

- 1008 Legge, James G.** Children's workshops in Sweden. Monthly review, Oct. 1901, v. 5: 103-113.
 AP4.M882,v.5
- 1009 ——— and M. E. Sadler.** Note on children's workshops in Sweden. (In Great Britain. Board of education. Special reports on educational subjects. v. 8, p. 143-147. London, 1902. 23^{cm}.)
 L341.A7,v.8
- 1010 Norway. Laws, statutes, etc.**
 The following laws relate to the employment of children:
 Norsk Lovtindende: Sept. 10, 1909, p. 413; July 25, 1910, p. 453; April 24, 1906, p. 189; July 29, 1911, p. 426.
 Prepared by the Leg. Ref. Div.
- 1011 Sweden.** Kvinnors och minderårigas användande vid fabriker och bergverk i Sverige år 1912. (Die Beschäftigung der Frauen und Minderjährigen in den Fabriken und Bergwerken in Schweden 1912) Sweden. Socialstyrelsen. Sociala meddelanden, 1914, no. 4: 299-309. (Statistiska meddelanden, ser. F. Bd. V: 4)
 HD8571.A25 1914
 Annual since 1901.
- 1012 ——— Kommitté för ordnande af fosterbarnsvården, 1894.** Underdånigt förslag till ordnande af fosterbarnsvården m. m. afgifvet af den af Kongl. Maj:t för ändamålet tillsatta komité. Stockholm, K. L. Beckmans boktryckeri, 1897. 1 p. l., [2], 198 p. incl. tables. 23 $\frac{1}{2}$ x 19 $\frac{1}{2}$ ^{cm}.
 HV790.A4 1897
- 1013 ——— Laws, statutes, etc.** Act in regard to the protection of labour. (Dated June 29, 1912) International labor office. Bulletin, 1913, v. 8, no. 2: 84-97.
 HD7801.I6,v.8
 Special directions as to the employment of minors: p. 87-89.

SPAIN.

- 1014 Chauvet, Émile.** La protection légale des travailleurs en Espagne. Paris: Société nouvelle de librairie et d'édition (G. Bellais) 1903. 132 p. 25^{cm}.
 HD7916.C5
 "Bibliographie": p. [127]-129.
 Appendice: Loi du 15 mars 1900 réglementant le travail des femmes et des enfants: p. [119]-126.
- 1015 Delas, Joseph-Marie.** La réglementation du travail des enfants et des femmes en Espagne. (In Congrès international de législation du travail tenu à Bruxelles du 27 au 30 septembre 1897, p. 121-127. Bruxelles, 1898. 23^{cm}.)
- 1016 Marmel, Tarrida del.** Children's work in Spain. (In International congress of women, London, 1899. London, 1900. 20 $\frac{1}{2}$ ^{cm}. v. 6, p. 82-84)
 HQ1106 1899,v.6
- 1017 Spain.** Instituto de reformas sociales. Sección primera. Legislación del trabajo. Madrid, Impr. de la sucesora de M. Minuesa de los Ríos, 1905. 4 p. l., [3]-358 p. 24^{cm}.
 HD7916.A5
 Apéndice 1-8, Julio, 1905-1912. Madrid, 1906-1913. 8 v. 21^{cm}.

- 1018 **Spain. Instituto de reformas sociales.** Proyecto de reglamentación especial del trabajo de la mujeres y niños [redactado por la Sección segunda técnico-administrativa] Madrid, Impr. de la Compañía arrendataria de la "Gaceta de Madrid," 1905. 2 p. l., [7]-29 p. 22½^{cm}. HD6083.S7A4
- 1019 ——— **Laws, statutes, etc.** The following laws relate to the employment of children:
March 13, 1900; July 26, 1878; July 23, 1903; Aug. 12, 1904; Jan. 24, 1908; March 21, 1907; Feb. 8, 1911.
Prepared by Leg. ref. div.
- 1020 ——— **Consejo superior de protección á la infancia; leyes y disposiciones vigentes de protección á la infancia.** Madrid, imprenta del Asilo de Huérfanos, 1908. 128 p.
- 1021 **Villota y Presilla, Isidro de.** El trabajo industrial de los menores de 18 años en España; . . . con notas estadísticas por Antonio Revenga y Alzamora. Madrid, Imp. de la suc. de M. Minuesa de los Ríos, 1908. 50 p., 1 l. 23^{cm}. (Asociación internacional para la protección legal de los trabajadores. Sección española.—núm. 8) HD6250.S7V6

SWITZERLAND.

- 1022 **Bertoni, B.** La protezione dell'infanzia nella nuova legislazione svizzera. Rivista italiana di sociologia, May-Aug. 1909, v. 13: 389-405.
H7.R7,v.13
- 1023 **Deutsch, Julius.** Die Kinderarbeit und ihre Bekämpfung. Zürich, Rascher & co., Meyer & Zeller's nachf., 1907. xi, 247 p. 21½^{cm}. (Zwei von der Universität Zürich preisgekrönte Arbeiten über Kinderschutz . . . [1])
HD6250.S9D6
- 1024 **Die Erwerbstätigkeit der Schulkinder im Kanton St. Gallen.** Germany. Statistisches Amt. Abteilung für Arbeiterstatistik. Reichs-Arbeitsblatt, June, 1912, v. 10: 441-444. HD8441.A3,v.10
- 1025 **Goldstein, Fanny.** Der Arbeiterschutz zu gunsten der Kinder und Frauen in der Schweiz. Zeitschrift für schweizerische Statistik, 1904, v. 40, Bd. 1: 306-359. HA1.Z5,v.40
Literaturverzeichnis: p. 357-359.
- 1026 **Landmann, Jul.** Die Nachtarbeit der jugendlichen Arbeiter in der Schweiz. Schweiz. Blätter für wirtschaft-und soziale Politik, 1906, p. 523-533.
- 1027 **Morant, R. L.** The national organisation of education of all grades as practised in Switzerland. (In Great Britain. Board of education. Special reports on educational subjects. London, 1898. 24½^{cm}. v. 3, p. 1-82)
L341.A7,v.3
"Federal law in compulsory primary education; Federal law on child labour," pp. 13-14.
- 1028 **Ryff, Mme.** Children under the factory laws of Switzerland. (In International congress of women, London, 1899. London, 1900. 20½^{cm}. v. 6, p. 60-66) HQ1106 1899,v.6
- 1029 **Schwyzler, Eugen.** Die jugendlichen arbeitskräfte im handwerk und gewerbe, in der hausindustrie und in den fabriken. Zürich, E. Leemann, 1900.
Separatabdruck aus der "Schweiz. zeitschrift für gemeinnützigkeit" xxxix. jahr, heft m
- 1030 **Veditz, Charles William August.** Child-labor legislation in Switzerland. (In U. S. Bureau of labor. Bulletin, July, 1910, no. 89. Washington, 1910. p. 326-413) HD8051.A5,no.89
- 1031 **Wirth, Max.** Aperçu des législations suisse et anglaise, sur le travail des enfants dans les manufactures. Revue de droit international, 1869, v. 1: 172-189. JX3.R4,v.1

- 1032 **Zinalli, Ph.** Die Beschäftigung der schulpflichtigen Kinder in Hausindustrie und andern Erwerbsarten im Kanton Appenzell A.-Rh. Zeitschrift für schweizerische Statistik, 1905, v. 41, bd. 1: 164-183. HA1.Z5,v.41
Literatur: p. 181.
- 1033 **Zürcher, E.** Die Gesetzgebung über die Arbeit von Kindern und Jugendlichen. Bericht, erstattet an der 10. Generalversammlung der Schweizer. Vereinigung zur Förderung des internationalen Arbeiterschutzes am 18. Juni 1909 in Zürich. Schweiz. Blätter für Wirtschafts- und Sozialpolitik, 1910, p. 417-430.
- 1034 ——— Die Gesetzgebung über Kinderarbeit und die intern. Vereinigung für gesetzlichen Arbeiterschutz. Schweiz. Blätter für Wirtschafts- u. Sozialpolitik, 1912, no. 20, u. 21.

OTHER COUNTRIES.

- 1035 **Argentine Republic. Departamento nacional del trabajo.** Trabajo de mujeres y de menores. (*In its Boletín*, Dec. 31, 1913, no. 25: 858-875) HD8261.A3,no.25
- 1036 ——— El trabajo de los menores en la via publica. (*In its Boletín*, Dec. 31, 1913, no. 25: 836-843) HD8261.A3,no.25
- 1037 **Regelung der Frauen-Kinder- und Jugendlicherarbeit** (Argentinien, Gesetz und Verordnung). Soziale Rundschau, Feb. 1914, v. 1, p. 58-61; v. 2, p. 61-73. HD8401.A2 1914
- 1038 **Kinderarbeit in Brasilien.** Soziale Praxis, Jan. 11, 1912, v. 21: 456-457. H5S7,v.21
- 1039 **Bulgaria. Laws, statutes, etc., 1905.** Loi sur le travail des femmes et des enfants dans les établissements industriels. Votée et adoptée par l'Assemblée nationale, ratifiée par oukaze princier du 25 mars 1905. Sofia, Imprimerie "Sainte-Sophie," 1906. 12 p. 18½^m. HD6083.B9A5 1905
- 1040 **Denmark. Laws, statutes, etc.** The following laws relate to the employment of children:
Lovtidende: Apr. 29, 1913, p. 481; Apr. 11, 1901, p. 317; Nov. 1, 1902, p. 554; June 11, 1904, p. 518; Apr. 6, 1906, p. 635; May 7, 1906, p. 523; June 4, 1908, p. 680; July 17, 1907, p. 226; July 22, 1908, p. 759; Jan. 23, 1908, p. 25; May 10, 1912, p. 104; June 8, 1912, p. 165.
Prepared by Leg. Ref. Div.
- 1041 ——— Gesetz über die Arbeit in Fabriken und damit gleichgestellten Betrieben sowie über deren öffentliche Ueberwachung. Bulletin des Internationalen Arbeitsamts, Jan.-Mar. 1902, v. 1: 13-21. HD7801.B9,v.1
- 1042 ——— Act regulating work in bakeries and confectionery businesses. (No. 171, 1906) Apr. 6, 1906. International labor office. Bulletin, 1906, v. 1, nos. 4-8: 177-182. HD7801.I6,v.1
- 1043 ——— Notification of an Order for the commercial town of Esbjerg . . . relating to the employment of children and young persons for purposes of gain in certain specified classes of occupations. Dated July 17, 1907. International labor office. Bulletin, 1908, v. 3, no. 2: 145-146. HD7801.I6,v.3
- 1044 ——— Act (No. 155) respecting work in bakeries and confectionery businesses. (Dated June 8, 1912.) International labor office. Bulletin, 1913, v. 8, no. 6, 7: 272-277. HD7801.I6,v.8
- 1045 ——— Act relating to work in factories, etc., and the public inspection of the same. (Dated April 29, 1913.) International labor office. Bulletin, 1913, v. 8, no. 8: 324-343. HD7801.I6,v.8

- 1046 **Greece. Laws, statutes, etc.** Act no. 4029 concerning the work of women and minors. (Dated 24th Jan.-6th Feb. 1912.) International labor office. Bulletin, Nov. 1912, v. 7: 285-290. HD7801.I6,v.7
 ——— Royal decree, respecting the execution of the act no. 4029, concerning the work of women and minors in factories, workshops, commercial firms, and stores of any kind. (Dated 14th-27th Aug. 1913.) International labor office. Bulletin, Sept. 1914, v. 9: 219-225. HD7801.I6,v.9
- 1047 **The Legislative efforts of England and Greece for the regulation of child labor.** Craftsman, July, 1912, v. 22: 457-458. N1.C87,v.22
- 1048 **Portugal. Laws, statutes, etc.** Act no. 297 to amend various sections of the order relating to the employment of minors and women in industrial undertakings. (Dated 22nd Jan. 1915.) International labor office. Bulletin, Oct. 1915, v. 10: 109-111. HD7801.I6,v.10

INDUSTRIES.

AGRICULTURE.

- 1049 **Adams, M. Bridges.** Rural child workers and free school meals. Nation, London, Feb. 13, 1915, v. 16: 620. AP4.N15,v.16
- 1050 **Agahd, Konrad.** Die gesetzliche Regelung der Kinderarbeit in Landwirtschaft und Haushalt. (In Soziale Praxis, June 22, 29, 1905, v. 14, cols. 985-989; 1009-1012) H5.S7,v.14
- 1051 **Albrecht, Otto.** Kinderarbeit in Gärtnereien Generalkommission der Gewerkschaften Deutschlands. Correspondenzblatt, Aug. 9, 1913, v. 23: 487-489. HD8443.G3,v.23
- 1052 **Die Beschäftigung von Schulkindern mit gewerblichen landwirtschaftlichen und sonstigen Arbeiten in Österreich.** Soziale Rundschau, Aug. 1903, v. 1, p. 277-285. HD8401.A2 1903,v.1
- 1053 **Bremer, Harry M.** Agricultural work and school attendance. Child labor bulletin, May, 1914, v. 3, no. 1: 153-158. HD6250.U3N4,v.3,no.1
- 1054 ——— People who go to tomatoes; a study of four hundred families. New York, National child labor committee, 1914. 16 p. 23^{cm}. (Pamphlet no. 215) HD6250.U3N2
- 1055 ——— Strawberry pickers of Maryland. Child labor bulletin, Feb. 1914, v. 2, no. 4: 70-75. HD6250.U3N4,v.2
- 1056 **Carleton, Ernest E.** Agricultural training for British lads oversea. Empire review, Apr. 1914, v. 27: 170-176. DA10.E5,v.27
- 1057 **Child labor in agriculture.** Nation, London, Mar. 13, 1915, v. 16: 735-736. AP4.N15,v.16
- 1058 **Child labor in agriculture.** New statesman, Feb. 13, 1915, v. 4: 453-454. AP4.N64,v.4
- 1059 **Chute, Charles L.** The cost of the cranberry sauce. Survey, Dec. 2, 1911, v. 27: 1281-1284. HV1.C4,v.27
- 1060 **Clopper, Edward N., and Lewis W. Hine.** Child labor in the sugar-beet fields of Colorado. Child labor bulletin, Feb. 1916, v. 4, no. 4: 176-206. HD6250.U3N4,v.4,no.4
 National child labor committee. Pamphlet no. 259. 34 p.
- 1061 **Gillette, John M.** Rural child labor. Child labor bulletin, v. 1, no. 1, June, 1912, p. 154-160. HD6250.U3N4,v.1

- 1062** **Gt. Brit. Commission on employment of children, young persons, and women in agriculture (1867).** Report[s, with appendices] London, Printed by G. E. Eyre and W. Spottiswoode, for H. M. Stationery off., 1868-70. 7 v. in 3. 33^{cm}. [Parliament. Papers by command] HD6073.A4G7
Found also in Gt. Brit. Parliament. Sessional papers, 1867-68, v. 17; 1868-69, v. 13; 1870, v. 13. J301.K6
- 1063** ——— **Poor law commissioners.** Reports of special assistant poor law commissioners on the employment of women and children in agriculture. London, Printed by W. Clowes and sons, 1843. xiv p., 1 l., 378 p., 1 l. illus. 22^{cm}. HD6135.A5 1843
Also found in Gt. Brit. Parliament. Sessional papers, 1843, v. 12. 510 JK301.K6 1843,v.12
- 1064** ——— **Royal commission on labour.** The agricultural labourer . . . [Assistant commissioners' reports] Presented to both houses of Parliament by command of Her Majesty. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, 1893-94. 5 v. in 4. fold. map, diagrs. 34^{cm}. ([Parliament. Papers by command] C. 6894—I-VI, XIII-XXII, XXIV-XXV) HD1532.A3 1893
Contains much general information and statistics relating to child labor in agriculture in England, Scotland, Ireland, and Wales; and vol. 5, pt. 2, contains "Memorandum on the reports and proceedings of the Children's employment commission, 1862, and the Commission on the employment of children, young persons, and women in agriculture, 1867, by William C. Little." Also found in Gt. Brit. Parliament. Sessional papers. 1893-94, v. 35-37. J301.K6,v.35-37
- 1065** **Greenwood, Arthur.** Agriculture and child labour. Political quarterly, London, May, 1915, no. 6: 119-144. JA8.P7 May,1915
- 1066** **Haebach, Wilhelm.** A history of the English agricultural labourer. Newly ed. by the author and tr. by Ruth Kenyon. With a preface by Sidney Webb. London, P. S. King & son, 1908. xvi, 470 p. 22^{cm}. (Studies in economics and political science, no. 15 in the series of monographs by writers connected with the London school of economics and political science) HD1534.H34
See Index under Child-labour: p. 452-453.
- 1067** **Hine, Lewis W.** Children or cotton? Raising the question of cotton picking in Texas. Survey, Feb. 7, 1914, v. 31: 589-592. HV1.C4,v.31
- 1068** **Hutchinson, Woods.** Overworked children on the farm and in the school. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 116-121. H1.A4,v.33
National child labor committee. Pamphlet no. 105. 6 p. HD6250.U3N2,no.105
- 1069** **Lennard, Reginald.** Child labor in the counties. Nation, London, Feb. 20, 1915, v. 16: 648-649. AP4.N15,v.16
- 1070** **Lovejoy, Owen R.** The cost of the cranberry sauce. Survey, Jan. 7, 28, 1911, v. 25: 605-610, 711. HV1.C4.v.25
- 1071** ——— Jersey cranberry bogs. Survey, Dec. 26, 1914, v. 33: 342. HV1.C4,v.33
- 1072** **MacCulloch, Campbell.** Who picked your cranberries? Good housekeeping, Nov. 1913, v. 57: 669-677. TX1.G7,v.57
- 1073** **Macdonald, N. C.** The case of the country boy. Interview with N. C. Macdonald, state inspector of rural and graded schools. [n. p.] 1912.
"In the Fargo Courier-news of February 4th, 1912."
- 1074** **McKelway, A. J.** The mill or the farm? American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35:52-57. H1.A4,v.35
- 1075** **Sanger, Robert C.** "Cost of the cranberry sauce." Survey, Jan. 28, 1911, v. 25: 711. HV1.C4,v.25

- 1076 **Selley, Ernest.** Employment of boy labor of farms. Nation, London, Apr. 3, 1915, v. 17: 17-18. AP4.N15,v.17

CANNERIES.

- 1077 **Bache, René.** Shrimps and babies. Technical world magazine, Jan. 1912, v. 16: 497-504. T1.T2,v.16
- 1078 **Brown, Edward F.** The neglected human resources of the Gulf Coast states. National child labor committee, New York. The child labor bulletin, May, 1913, v. 2, no. 1: 112-116. HD6250.U3N4,v.2,no.1
- 1079 ——— The toiling children of the Gulf coast canneries: a field investigation, January-March, 1913. National child labor committee, New York. 1913. Pamphlet no. 193. p. 14-29. HD6250.U3N2,no.193
- 1080 **California.** Bureau of labor statistics. Special report of the Bureau of labor statistics, state of California. Labor conditions in the canning industry. Sacramento, Cal., F. W. Richardson, superintendent of state printing, 1913. 34 p. incl. tables, diagrs. 22 $\frac{1}{2}$ cm. HD6073.C32U73
Children—Employment, p. 4, 7-16, 18.
- 1081 **Chamberlain, Mary Louise.** Children in bondage: baby toilers in New York canneries. Good housekeeping, May, 1913, v. 56: 618-625. TX1.G7,v.56
- 1082 ——— The new bean bag. Survey, Feb. 15, 1913, v. 29: 664-665. HV1.C4,v.29
Brief note on child labor in the canneries of New York.
- 1083 **Child labor in the canneries [New York]** Literary digest, Dec. 14, 1912, v. 45: 1110-1112. AP2.L58,v.45
- 1084 **Goldmark, Pauline.** Child labor in canneries. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 55: 152-154. H1.A4,v.35
National child labor committee. Pamphlet no. 128. 8 p. HD6250.U3N2,no.128
- 1085 **Gompers, Samuel.** Child labor in the New York canneries. American federationist, Feb. 1913, v. 20: 133-136. HD8055.A5A2,v.20
- 1086 **Hine, Lewis W.** Baltimore to Biloxi and back: The child's burden in oyster and shrimp canneries. Survey, May 3, 1913, v. 30: 167-172. HV1.C4,v.30
- 1087 ——— Baltimore to Biloxi and back. National child labor committee. New York. 1913. Pamphlet no. 193. p. 6-13. HD6250.U3N2,no.193
- 1088 ——— Child labor in Gulf coast canneries. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 118-122. H1.A4,B.38
National child labor committee. Pamphlet no. 158. 6 p. HD6250.U3N2,no.158
- 1089 ——— The child's burden in oyster and shrimp canneries. Child labor bulletin, May, 1913, v. 2, no. 1: 105-111. HD6250.U3N4,v.2
- 1090 ——— Not a vacation farm: just a Maryland cannery. Survey, Mar. 21, 1914, v. 31: 765. HV1.C4,v.31
- 1091 **Kelley, Mrs. Florence.** A privileged industry. New York city, National consumers' league [1912] 7 p. illus. 24cm. HD5119.C2K4
"Reprinted from the Twentieth century magazine, Boston, July, 1912," v. 6: 32-37. AP2.T88,v.6
- 1092 **Lord, Everett W.** Child labor in the textile industries and canneries of New England. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 73-78. H1.A4,v.33
National child labor committee. Pamphlet no. 107. 6 p. HD6250.U3N2,no.107

- 1093 **Maryland. Bureau of statistics and information.** Child labor inspection of the canning industry. (*In its Report*, 1913, p. 76-84)
HC107.M3A15 1913
- 1094 **National child labor committee, New York.** Child labor in canneries . . . with other special articles. New York city, National child labor committee, 1913. 3 p. l., 95 p. incl. plates, maps. 23^{cm}. (The child labor bulletin, v. 1, no. 4)
HD6250.U3N4
CONTENTS.—Child labor and poverty: advance program of the 9th National conference on child labor.—The important provisions of existing child labor laws.—Child labor in New York canning factories [by] E. F. Brown.—Day and night in a vegetable canning factory: a personal experience [by] J. J. Eschenbrenner.—Photographic reproductions of children in fruit and vegetable, oyster, and shrimp canneries.—Child labor and health [by] O. R. Lovejoy.—Some dangers in the present movement for industrial education [by] John Dewey.—Overwork, idleness, or industrial education [by] William Noyes.—The child that toleth not: a reply to Mr. Dawley.
- 1095 ——— The child's burden in oyster and shrimp canneries. [New York, 1913] 32 p. 23^{cm}. (Pamphlet no. 193)
HD6250.U3N2,no.193
CONTENTS.—Baltimore to Biloxi and back, by Lewis W. Hine; Tolling children of the Gulf coast canneries, by Edward F. Brown; Needs in Mississippi and Florida, by Owen R. Lovejoy; Interstate commerce, by Owen R. Lovejoy.
- 1096 **New York (State) Bureau of labor statistics.** Report on the work of children and women in canneries. (*In New York (State) Bureau of factory inspection. Annual report*, 1908, p. 333-507)
HC107.N7A2 1908
- 1097 ——— **Bureau of statistics and information.** Special report on canneries and day of rest law. (*In New York (State) Dept. of labor. 14th annual report of the commissioner of labor*, 1914, p. 132-175)
HD8053.N7A2 1914
- 1098 **Obenauer, Marie L., and Mary Conyngton.** Employment of children in Maryland industries. U. S. Bureau of labor. Bulletin, Sept. 1911, v. 23, no. 96: 466-487.
HD8051.A5,v.23,no.96
Deals principally with the canning industry, but includes some information concerning the candy, biscuit, and paper-box factories.
- 1099 **Potter, Zenas L.** Child labor in the canneries of New York state. Child labor bulletin, June, 1912, v. 1: 135-139.
HD6250.U3N4,v.1
- 1100 ——— Industrial conditions in the canning industry of New York state. (*In New York (State) Factory investigating commission. Second report*, 1913. Albany, 1913. 23^{cm}. v. 2, p. 757-915. [Legislature, 1913. Senate doc. 36])
HD8053.N7A5 1913
See also Report, v. 1, p. 127-143: Child labor in the canneries.
- 1101 **Shorey, Eva L.** Women and children in sardine factories. (*In Maine. Bureau of industrial and labor statistics. Annual report* . . . 21st, 1907. Augusta, 1907. 23^{cm}. p. 121-137)
HC107.M2A3 1907
- 1102 **Three bits of testimony for the consumers of shrimp and oysters.** [Canneries at Pass Christian, Miss.] Survey, Feb. 28, 1914, v. 31: 663. HV1.C4,v.31
- 1103 **U. S. Bureau of labor.** Report on condition of woman and child wage-earners in the United States. v. 18. Employment of women and children in selected industries. Washington, Govt. print. off., 1913. 531 p. 23^{cm}. (61st Cong., 2d sess. Senate. Doc. 645. v. 18)
HD6093.A4,v.18
Canning and preserving: p. 39-56.
- 1104 ——— **Bureau of the census.** Thirteenth census of the United States: 1910. Bulletin. Manufactures: 1909. Statistics for canning and preserving. [Washington, Govt. print. off., 1913] 23 p. incl. tables. diagr. 31^{cm}.
HD9321.1.A3 1909
Contains the statistics of employment of children under 16 years of age.

- 1105 **U. S. Congress. House. Committee on rules.** Investigation of canneries. Hearings . . . on H. Res. 738 providing for the investigation of canneries of the United States. Jan. 11, 1913. Washington, Govt. print. off., 1913. 42 p. 23^{cm}. RA601.U6 1913
Alfred G. Allen, Chairman.
Statements of Mary Boyle O'Reilly, Frank C. Praete, J. Harry Covington, and Frank E. Gorrell.
- 1106 **Washington (State) Bureau of labor.** Biennial report. 9th, 1913-1914. Olympia, Wash., 1914. 320 p. plates, tables, diagrs. 23¹/₂^{cm}. HC107.W2A2 1913-1914
Female and child labor in canneries: p. 94-96. Child labor violations: p. 171-178.
- 1107 **Whitin, E. S.** Children in the canning industry. Outlook, Jan. 21, 1905, v. 79: 177-179. AP2.O8,v.79

CLOTHING.

- 1108 **Dodd, Edward Arthur.** Die Wirkung der Schutzbestimmungen für die jugendlichen und weiblichen Fabrikarbeiter und die Verhältnisse im Konfektionsbetriebe in Deutschland. Jena, G. Fischer, 1898. 236 p. 23^{cm}. (Sammlung nationalökonomischer und statistischer Abhandlungen. 16. Bd.) "Litteratur": p. 235-236. HD6083.G3D6
- 1109 **Merriman, C.** Searchlight turned on child labor and the tailoring trades. Survey, June 13, 1914, v. 32: 303-304. HV1.C4,v.32
- 1110 **Rochester, Anna.** Children at work on men's clothing. Child labor in the glass industry. A summary of volumes II and III of the federal Report on the condition of woman and child wage-earners in the United States, 61st Congress, 2d session, Senate document 645. New York city, National child labor committee, incorporated, 1914. 2 p. l., p. 93-129. 23^{cm}. (The child labor bulletin. v. 3, no. 2, pt. ii) HD6250.U3N4,v.3
- 1111 **U. S. Bureau of labor.** Report on condition of woman and child wage-earners in the United States. v. 2. Men's ready-made clothing. Washington, Govt. print. off., 1911. 878 p. 23^{cm}. (61st Cong. 2d sess. Senate. Doc. 645. v. 2) HD6093.A4,v.2
- 1112 **Van Kleeck, Mary.** Women and children who make men's clothes. Survey, Apr. 1, 1911, v. 26: 65-69. HV1.C4,v.26

GLASS.

- 1113 **Beschäftigung von Arbeiterinnen und jugendlichen Arbeitern in Glashütten** usw. Generalkommission der Gewerkschaften Deutschlands. Correspondenzblatt, June 14, 1913, v. 23: 355-357. HD8443.G3,v.23
- 1114 **Chute, Charles L.** The glass industry and child labor legislation. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 123-132. H1.A4,v.38
National child labor committee. Pamphlet no. 157. 11 p. HD6250.U3N2,no.157
- 1115 ——— Women and children in the glass industry. Survey, June 17, 1911, v. 26: 437-438. HV1.C4,v.26
- 1116 **Germany.** Bekanntmachung, betreffend die Beschäftigung von Arbeiterinnen und jugendlichen Arbeitern in Glashütten, Glasschleifereien und Glasbeizereien sowie Sandbläsereien. Vom 9. März 1913. Germany. Statistisches Amt. Abteilung für Arbeiterstatistik. Reichs-Arbeitsblatt, May, 1913, v. 11: 381-383. HD8441.A3,v.11
- 1117 **Gesellschaft für Soziale Reform.** Das Verbot der Nachtarbeit jugendlicher Arbeiter in den Glashütten. Soziale Praxis, Oct. 12, 1911, v. 21: 50-52. H5.S7,v.21

- 1118 **Grünzel, H.** Die Nacharbeit der Jugendlichen in den Glasfabriken. Generalkommission der Gewerkschaften Deutschlands. Correspondenzblatt, Aug. 16, 1913, v. 23: 500. HD8443.G3,v.23
- 1119 **Hall, Fred S., comp.** What the government says about child labor in glass factories. National child labor committee, New York, 1911. Pamphlet no. 152. 4 p. HD6250.U3N2,no.152
- 1120 **Hayes, Denis A.** Length of the trade life in the glass bottle industry. American academy of political and social science, Annals, May, 1906, v. 27: 496-499. H1.A4,v.27
- 1121 **International association for labor legislation.** Prohibition of night work of young persons. April 10, 1913. Washington, Govt. print. off., 1913. 74 p. 23 $\frac{1}{2}$ cm. (Bulletin of the United States Bureau of labor statistics, whole no. 117. Miscellaneous series, no. 2) HD8051.A5,no.117
Night work of young persons in the glass industry: p. 28-41.
- 1122 **Kelley, Mrs. Florence.** Boy-destroying trade; the glass bottle industry of New Jersey, Pennsylvania, Ohio, Indiana, and Illinois. Charities, July 4, 1903, v. 11: 15-19. HV1.C4,v.11
- 1123 **Kestner, Fritz.** Die Nacharbeit jugendlicher Arbeiter in Walzwerken, Hammerwerken und Glashütten. Jahrbücher für Nationalökonomie und Statistik, Sept. 1910, 3. Folge, v. 40: 353-374. HB5.J3,3d ser.v.40
- 1124 **Lovejoy, Owen R.** Child labor in the glass industry. American academy of political and social science, Annals, Mar. 1906, v. 27: 300-311. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 42-53; Pamphlet no. 28. 12 p. HD6250.U3N2,no.20; no.28
- 1125 ——— Children in the glass industry in Pennsylvania. [3d ed. rev.] New York, 1909. 15 p. illus. 15 $\frac{1}{2}$ x8 $\frac{1}{2}$ cm. (National child labor committee. [Publications. Smaller series] Leaflet no. 14) HD6250.U3N19,no.14
- 1126 **Markham, Edwin.** Child-wrecking in the glass-factories. Cosmopolitan magazine, Oct. 1906, v. 41: 567-574. AP2.C8,v.41
The hoe-man in the making series.
- 1127 **National child labor committee, New York.** Story of the medicine bottle. Child labor bulletin, Aug. 1913, v. 2: 10-17. HD6250.U3N4,v.2
- 1128 **Rochester, Anna.** Child labor in the glass industry. National child labor committee, New York. Child labor bulletin, Aug. 1914, v. 3, no. 2, pt. 2: 108-125. HD6250.U3N4,v.3
Compiled from vol. 3 of the Report on the condition of woman and child wage-earners in the United States.
- 1129 **U. S. Bureau of labor.** Report on condition of woman and child wage-earners in the United States. v. 3. Glass industry. Washington, Govt. print. off., 1911. 970 p. 23cm. (61st Cong. 2d sess. Senate. Doc. 645. v. 3) HD6093.A4,v.3
- 1130 ——— **Bureau of the census.** Thirteenth census of the United States: 1910. Bulletin. Manufactures: 1909. Statistics for the manufacture of glass. [Washington, Govt. print. off., 1913] 12 p. incl. tables. 30 $\frac{1}{2}$ cm. HD9623.U45A5 1909
Contains statistics of the employment of children under 16 years of age.
- 1131 **Van der Vaart, Mrs. Harriet.** Children in the glass works of Illinois. American academy of political and social science, Annals, Jan. 1907, v. 29: 77-83. H1.A4,v.29
National child labor committee. Pamphlet no. 50. 7 p. HD6250.U3N2,no.50

- 1132 **Zum Schutze der Jugendlichen und Arbeiterinnen in der deutschen Glasindustrie.** Generalkommission der Gewerkschaften Deutschlands. Correspondenzblatt, Nov. 23, 1912, v. 22: 703-704. HD6443.G3,v.22

HOME WORK.

- 1133 **Adler, Eleanor H.** Child flower-makers in New York tenements. Child labor bulletin, Feb. 1915, v. 3, no. 4: 17-19. HD6350.U3N4,v.3
- 1134 **Adler, Nettie.** Child workers and wage-earners. Royal society of arts, Journal, June 12, 1908, v. 56: 738-747. T1.S64,v.56
- 1135 **Alden, Percy.** The problem of sweating. Chautauquan, Nov. 1910, v. 80: 337-355. AP2.C48,v.60
- 1136 **Ballantyne, A.** Home-work. (In Oliver, Sir Thomas, ed. Dangerous trades. London, J. Murray, 1902. p. 98-103) HD7262.O5
- 1137 **Betts, Lillian W.** Child labor in shops and homes. Outlook, Apr. 18, 1903, v. 73: 921-927. AP2.O6,v.73
- 1138 **Bierer, Willy.** Die hausindustrielle Kinderarbeit im Kreise Sonneberg; ein Beitrag zur Kritik des Kinderschutzgesetzes. Tübingen, J. C. B. Mohr (P. Siebeck) 1913. vi p., 1 l., 167 p. 24^{cm}. (Archiv für Sozialwissenschaft und Sozialpolitik . . . Ergänzungsheft xi) HD6250.G4B5
"Gesetz betr. Kinderarbeit in gewerblichen betrieben. Vom 28. März 1903": p. 129-163.
- 1139 **Booth, Charles, ed.** Labour and life of the people. London and Edinburgh, Williams and Norgate, 1891. 2 v. in 3. maps (partly fold.) tables. 22^{cm}. HV4088.L8B7
Sweating, by Charles Booth. v. 1, p. 481-500.
- 1140 **Brussels. Exposition du travail à domicile, 1910.** Documents—monographies—statistiques. Bruxelles, Mich & Thron, 1911. lxi, 459 p. plates. 27^{cm}. HD2336.N3B82
"Notes médicales sur la condition hygiénique de certaines catégories de travailleurs à domicile" p. [265]-300.
- 1141 **Collet, Clara E.** Home-work. (In Booth, Charles, ed. Labour and life of the people . . . London and Edinburgh, Williams and Norgate, 1891. 2 v. v. 1, p. 445-461) HV4088.L8B7
- 1142 **Daniels, Annie S.** The causes, evils and remedy for tenement-house manufacturing. (In International congress of hygiene and demography. Transactions, 15th, 1912, v. 3: 1011-1014) RA122.N585,1912,v.3
- 1143 **Dorr, Rheta C.** The child who toils at home. Hampton-Columbian magazine, Apr. 1912, v. 28: 183-188, 221-223. AP2.H152,v.26
- 1144 **Goldmark, Pauline.** Art work in tenements. Survey, Apr. 15, 1911, v. 26: 114-115. HV1.C4,v.26
- 1145 **Gottschalk, Alfred.** Die Mitgabe von Hausarbeit an Arbeiterinnen und jugendliche Arbeiter. Soziale Praxis, Apr. 4, 1912, v. 21: 840-843. H5.S7,v.21
- 1146 **Gr. Brit. Parliament. House of commons. Select committee on home work.** Report; together with the proceedings of the committee, minutes of evidence, appendix, and Index. Ordered, by the House of commons, to be printed, 8 August 1907. London, Printed for H. M. Stationery off., by Wyman and sons, limited, 1907-08. x, 247 p., 1 l., 249-290 p. 33^{1/2}cm. ([Parliament, 1907. H. of C. Repts. and papers] 290)
See Index under Children, Employment of. HD2336.G6A4 1907

- 1147 **Gt. Brit. Parliament. House of commons. Select committee on home work.** Report, together with the proceedings of the Committee minutes of evidence, and appendix [also Index] Ordered, by the House of commons, to be printed 22d July, 1908. London, Printed for H. M. Stationery off., by Vacher and sons, 1908. L, 234 p. 33^{cm}. ([Parliament, 1908. H. of C. Repts. and papers] 246) HD2336.G6A4 1908
With this are bound: Home work regulation bill [Bill 90] and Home work bill [Bill 200]
See Index under Children, Employment of.
- 1148 **Hall, George A.** Unrestricted forms of child labor in New York state. (*In* New York state conference of charities and correction. Proceedings. Twelfth. Albany, 1911. p. 91-103) HV88.N7 1911
National child labor committee. Pamphlet no. 168. 14 p.
HD6250.U3N2,no.168
- 1149 ——— *comp.* What the United States government says about child labor in tenements.
National child labor committee. Pamphlet no. 151. 16 p.
HD6250.U3N2,no.151
- 1150 **Hine, Lewis W.** Child work in the home; what it is, what it should be. By Lewis W. Hine and Jessie P. Rich. New York city, National child labor committee [1914?] 8 p. 23^{cm}. (National child labor committee. Pamphlet no. 232)
Reprinted from the Child labor bulletin, v. 3, no. 1, May, 1914.
HD8250.U3N4,v.3
- 1151 ——— Photographs taken in the tenements. Child labor bulletin, Nov. 1912, v. 1, no. 3: 35-65. HD6250.U3N4,v.1
- 1152 **Hird, Frank.** The cry of the children; and exposure of certain British industries in which children are iniquitously employed. London, J. Bowden; New York, M. F. Mansfield, 1898. 96 p. illus., plates. 19^{cm}
HD6250.G7H4
- 1153 **Hogg, Mrs. Edith F.** Children outside the factory laws. (*In* International congress of women, London, 1899. London, 1900. 20^{1/2}^{cm}. v. 6, p. 71-76) HQ1106 1899,v.6
- 1154 **Hopkins, Mary Alden.** Children in bondage: turning children's homes into factories. Good housekeeping, June, 1913, v. 56: 743-752. TX1.G7,v.56
- 1155 ——— Our other children. Collier's, July 20, 1912, v. 49: 12-13.
AP2.C65,v.49
- 1156 **Independent** [Editorial] Sweating industries. Independent, Dec. 12, 1912, v. 73: 1391-1392. AP2.I53,v.73
- 1157 **Kelley, Mrs. Florence.** Insanitary conditions amongst home workers. (*In* International congress of women, London, 1899. London, 1900. 20^{1/2}^{cm}. v. 6, p. 21-25.) HQ1106 1899,v.6
- 1158 ——— Minimum-wage boards. American journal of sociology, Nov. 1911, v. 17: 303-314. HM1.A7,v.17
- 1159 **Lovejoy, Owen R.** Memorandum on tenement-house work in New York city. Child labor bulletin, Nov. 1912, v. 1, no. 3: 26-31 HD6250.U3N4,v.1
- 1160 ——— Some unsettled questions about child labor. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 49-62.
H1.A4,v.33
National child labor committee. Pamphlet no. 108. 14 p.
HD6250.U3N2,no.108

- 1161 **Lovejoy, Owen B. and Elisabeth C. Watson.** Home work in the tenement houses of New York city. (*In* New York (State) Factory investigating commission. Preliminary report, 1912. Albany, 1912. 23^{cm}. v. 1, p. 571-584) HD8053.N7A5 .1912
- 1162 **Markham, Edwin.** The blight on the Easter lilies. *Cosmopolitan magazine*, Apr. 1907, v. 42: 667-673. AP2.C8,v.42
The hoe-man in the making series.
- 1163 ——— The smoke of sacrifice. *Cosmopolitan magazine*, Feb. 1907, v. 42: 391-397. AP2.C8,v.42
The hoe-man in the making series.
- 1164 ——— The sweat-shop inferno. *Cosmopolitan magazine*, Jan. 1907, v. 42: 327-333. AP2.C8,v.42
The hoe-man in the making series.
- 1165 **Massachusetts. Bureau of statistics.** Industrial home work in Massachusetts; the results of an inquiry made in co-operation with the Women's educational and industrial union, Department of research. June 12, 1914. Boston, Wright & Potter printing company, state printers, 1914. 183 p. incl. tables. plates. 23^{cm}. (Labor bulletin no. 101) HC107.M4A3,no.101
Part v. of the Annual report on the statistics of labor for 1914.
Bibliography: p. 152-177.
"A conspicuous evil found was that of child labor, approximately one-fifth of the home workers whose ages were reported being under 14 years of age . . ."
- 1166 **Mény, Georges.** Le travail à domicile, ses misères, les remèdes. Paris, M. Rivière et cie, 1910. 463, [1] p. 25^{cm}. (Systèmes et faits sociaux)
"Index bibliographique": p. [423]-440. HD2331.M4
"Table des auteurs cités": p. [441]-448.
L'emploi des enfants mineurs: p. 85-92.
- 1167 **National child labor committee, New York.** Children who work in the tenements. New York, 1908. Pamphlet no. 84. 8 p.
HD6250.U3N2,no.84
- 1168 **Nearing, Scott.** On the trail of the Pittsburg stogie. *Independent*, July 2, 1908, v. 65: 22-24. AP2.I53,v.65
- 1169 **Netherlands (Kingdom, 1815-) Directie van den arbeid.** Onderzoekingen naar de toestanden in de Nederlandsche huisindustrie . . . Uitg. voor rekening van het Departement van landbouw, nijverheid en handel. 's-Gravenhage, Ter Algemeene landsdrukkerij, 1911-14. 3 v. plates. 26^{1/2}cm. [Uitgaven no. 7a, 7b, 7c] HD2336.N2A3
CONTENTS.—deel I. Voedings- en genotmiddelen.—deel II. Diamantbewerking. Drukkersbedrijf. Chemische industrie. Hout- en stroobewerking. Metaalbewerking. Papierbewerking. Schoenmakers.—deel 3. Textielindustrie. Kleding en reiniging.
- 1170 **New York (State) Bureau of labor statistics.** Annual report. Albany, 1890, 1902. 2 v. tables. 23^{1/2}cm. HC107.N7A3
8th, 1890: Child labor, pt. 1, p. 37-108.
20th, 1902: Earnings in home industries: p. 37-239.
- 1171 **Riis, Jacob A.** The children of the poor. New York, C. Scribner's sons, 1892. xi, 300 p. incl. illus., plates, diagrs. 20^{cm}. HV885.N49R6
"The little toilers": p. 92-117.
- 1172 ——— How the other half lives; studies among the tenements of New York. New York, C. Scribner's sons, 1903. xv, [1], 304 p. incl. front., illus., plans, 19^{1/2}cm. HV4046.N6R58
- 1173 **Schwyzzer, Eugen.** Die jugendlichen Arbeitskräfte im Handwerk und Gewerbe, in der Hausindustrie und in den Fabriken. Zürich, E. Leemann, 1900.
Separatabdruck aus der "Schweiz. Zeitschrift für Gemeinnützigkeit" XXXIX. Jahr. Heft III.

- 1174 **Sergeant, Elizabeth Shepley.** In chains. Outlook, June 24, 1911, v. 98: 448-453. AP2.O8,v.98
Chain making in England as a form of home work.
- 1175 ——— Toilers of the tenements. McClure's magazine, July, 1910, v. 35: 231-248. AP2.M2,v.35
- 1176 **Sigg, Jean.** L'enfant dans l'industrie domestique en Suisse. La Revue socialiste, Sept. 1903, v. 38: 346-369. HX5.R4,v.38
- 1177 **Simson, Frau.** Child labour outside the factory laws. (In International congress of women, London, 1899. London, 1900. 20 $\frac{1}{2}$ cm. v. 6, p. 76-81.) HQ1106 1899 v.6
- 1178 **A Sweat shop: Rag-stripping: A court tailor shop.** American academy of political and social science, Annals, Jan. 1907, v. 29: 238-243 H1.A4,v.29
- 1179 **Tuckwell, Gertrude M.** The "sweated industries" exhibition. Progress, July, 1906, v. 1: 193-203. HN381.P9,v.1
- 1180 **Van Kleeck, Mary.** Artificial flower makers. New York, Survey associates, inc., 1913. xix, 261 p. incl. front., tables, charts. plates. 20 $\frac{1}{2}$ cm. (Russell Sage foundation. [Publications]) HD6073.A7V3
Children: home workers: p. 94-107; shop workers: p. 25-27.
- 1181 ——— Child labor in home industries. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 145-149. H1.A4,v.35
National child labor committee. Pamphlet no. 134. 7 p. HD6250.U3N2,no.134
- 1182 ——— Child labor in New York city tenements. Charities and the Commons, Jan. 18, 1908, v. 19: 1405-1420. HV1.C4,v.19
- 1183 **Watson, Elizabeth C.** Home work in the tenements. Survey, Feb. 4, 1911, v. 25: 772-781. HV1.C4,v.25
- 1184 ——— Memorandum on some phases of home-work in the New York tenements. Child labor bulletin, Nov. 1912, v. 1, no. 3, p. 32-34. HD6250.U3N4,v.1
- 1185 ——— Report on manufacturing in tenements in New York state. (In New York (State) Factory investigating commission. Second report, 1913. Albany, 1913. 23cm. p. 667-755. [Legislature, 1913. Senate doc. 36]) HD8053.N7A5 1913
- 1186 **White, Henry.** Perils of the home factory. Harper's weekly, Feb. 11, 1911, v. 55: 10. AP2.H32,v.55
- 1187 **Willis, W. N.** White slaves of toil; how women and children are sweated. London, Pearson, 1914. 208 p.
- 1188 **Wirth, Clara.** Die Kinderheimarbeit in der aargauischen Tabakindustrie. Würzburg, Franz Staudenraus, 1912. 241 p. 22 $\frac{1}{2}$ cm.
Inaugural-dissertation . . . Universität Zürich.
Quellen und Literatur: p. v-viii.
- 1189 **Zinali, Ph.** Die Beschäftigung der schulpflichtigen Kinder in Hausindustrie und andern Erwerbsarten im Kanton Appenzel A.-Rh. Zeitschrift für Schweizerische Statistik, 1905, v. 41; Bd. 1: 164-183. HA1.Z5,v.41
Literatur: p. 181.

MERCANTILE ESTABLISHMENTS.

- 1190 **Betts, Lillian W.** Child labor in shops and homes. Outlook, Apr. 18, 1903, v. 73: 921-927. AP2.O8,v.73
- 1191 **Bowen, Louise Haddock (de Koven)** "Mrs. J. T. Bowen". The department store girl; based upon interviews with 200 girls. Issued by the Juvenile protective association of Chicago. Text by Louise de Koven Bowen. [Chicago] 1911. 15 p. 18^{cm}.
- 1192 **Brewer, Franklin N.** Child labor in the department store. American academy of political and social science, Annals, July, 1902, v. 20: 165-178. H1.A4,v.20
- 1193 **Butler, Elizabeth Beardale.** Saleswomen in mercantile stores, Baltimore, 1909. New York, Charities publication committee, 1912. 217 p. 20 $\frac{1}{2}$ ^{cm}. (Russell Sage foundation [publications]) HD6070.B8
Cash girls and wrappers, p. 80-82; 105-108.
- 1194 **Cranston, M. E.** Girl behind the counter. World to-day, Mar. 1906, v. 10: 270-274. AP2.W75,v.10
- 1195 **Dorr, Mrs. Rheta C.** Christmas from the counter. Independent, Dec. 5, 1907, v. 63: 1340-1347. AP2.I53,v.63
- 1196 **Goldmark, Pauline, and George A. Hall.** Preliminary report on employment of women and children in mercantile establishments. (In New York (State) Factory investigating commission. Second report, 1913. Albany, 1913. 23^{cm}. v. 2, p. 1193-1270. [Legislature, 1913. Senate doc. 36]) HD8053.N7A5 1913
- 1197 **Gt. Brit. Home dept. Van boys and warehouse boys committee.** Report on the hours and conditions of employment of van boys and warehouse boys, appointed by His Majesty's principal secretary of state for the Home department [with Minutes of evidence] London, Pub. by H. M. Stationery off., printed by Eyre and Spottiswoode, ltd., 1913. 2 v. in 1. 33 $\frac{1}{2}$ ^{cm}. ([Parliament. Papers by command] Cd. 6886-6887) HD6250.G7A4 1913
- 1198 **Hopkins, M. A.** Girls behind the counter. Collier's weekly, Mar. 16, 1912, v. 48: 16-17. AP2.C65,v.48
- 1199 **Medley, K. I. M.** Van-boy labour. Economic review, Jan. 1911, v. 21: 57-62. HB1.E4,v.21
- 1200 **National civic federation review.** Department store number. Working conditions in New York stores. A report upon welfare activities in twenty-two retail concerns—Wrongs to be righted and specific recommendations for improvements—Length of workday—Women's wages—Relation of wage scale to white slavery. National civic federation review, July 15, 1913, v. 4: 1-32.
- 1201 **Ohio. Industrial commission. Dept. of investigation and statistics.** Wages and hours of labor of women and girls employed in mercantile establishments in Ohio in 1913. Columbus, O., 1914. 33 p. 23 $\frac{1}{2}$ ^{cm}. (Its Report no. 1) HD8053.O3A3,no.1
- 1202 **Pennsylvania. Dept. of labor and industry.** Conditions of women in mercantile establishments in Philadelphia. (In its Monthly bulletin, Jan. 1915, v. 2, no. 1, p. 15-98)
- 1203 **U. S. Bureau of labor.** Report on condition of woman and child wage-earners in the United States. v. 5. Wage-earning women in stores and factories. Washington, Govt. print. off., 1910. 384 p. 23^{cm}. (61st Cong. 2d sess. Senate. Doc. 645. v. 5) HD6093.A4,v.5
- 1204 **Van Kleeck, Mary.** Working conditions in New York department stores. Survey, Oct. 11, 1913, v. 31: 50-51. HV1.C4,v.31

- 1205 What it means to be a department store girl, as told by the girl herself. Ladies' home journal, June, 1913, v. 30: 8. AP2.L135,v.30
- 1206 Wilcox, W. R. Women in New York department stores: a reply. Survey, Nov. 15, 1913, v. 31: 181-183. HV1.C4,v.31
- 1207 Williamson, Robert. Training the "dead-ender". World's work, London, Mar. 1914, v. 23: 443-446. AP4.W85,v.23

MINES AND QUARRIES.

- 1208 [Ducrestiaux, Édouard] De la condition des ouvriers mineurs dans la Grande-Bretagne et en Belgique. Analyse de l'enquête ordonnée par le Parlement anglais sur le travail des enfants dans les mines. Bruxelles, Impr. de Vandoooren frères, 1843. 64 p. illus. 23^{cm}. HD6250.G7D8
"Extrait des Annales des travaux publics de Belgique," v. 1, p. [359]-420.
- 1209 Child labor in mines. American federationist, Jan. 1913, v. 20: 32-33. HD8055.A5A2,v.20
- 1210 Chute, Charles L. The child labor problem in Pennsylvania. Child, Chicago, Oct. 1912, v. 1: 9-12. HQ750.A2C3,v.1
- 1211 Clopper, E. N. Child labor in West Virginia. National child labor committee. Pamphlet no. 86. 24 p. HD6250.U3N2,no.86
- 1212 Durland, Kellogg. Child labor in Pennsylvania. Outlook, May 9, 1903, v. 74: 124-127. AP2.O8,v.74
- 1213 The Employment of pit girls. Manchester guardian, Jan. 27, 1914, p. 7.
- 1214 Germany. Bekanntmachung, betreffend die Beschäftigung jugendlicher Arbeiter auf Steinkohlenbergwerken in Preussen, Bayern, Sachsen und Elsass-Lothringen. Vom 7. März 1913. Germany. Statistisches Amt. Abteilung für Arbeiterstatistik. Reichs-Arbeitsblatt, Mar. 1913, v. 11: 222-223. HD8441.A3,v.11
- 1215 Gt. Brit. Children's employment commission. First report of the Commissioners. Mines. Appendix, part 1-2. Reports and evidence from sub-commissioners. Presented to both Houses of Parliament by command of Her Majesty. 1842. 4 vols. 33^{cm}. (Gt. Brit. Parliament. Sessional papers, 1842, v. 15, 16, pt. 1-2, 17, pt. 1-2) J301.K6 1842,v.15-17
- 1216 ——— Home dept. Mines and quarries: General report and statistics . . . 1914. Part II. Labour. London, Harrison & son, 1915. 52-100 p. tables, diagrs., chart. 344^{cm}. ([Parliament. Papers by command] Cd. 8135) Statistics of boys employed in mines: p. 68-71, 98. TN57.A48 1914
- 1217 ——— Laws, statutes, etc. An act to consolidate and amend the law relating to coal mines and certain other mines. 16th Dec., 1911. International labor office. Bulletin, Mar. 1914, v. 9: 9-12. HD7801.I6,v.9
Pt. 6: Employment of boys, girls, and women.
- 1218 Lovejoy, Owen B. Child labor in the coal mines. American academy of political and social science, Annals, Mar. 1906, v. 27: 293-299. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 35-41; Pamphlet no. 27. 7 p. HD6250.U3N2,no.20;no.27
- 1219 ——— Child labor in the soft coal mines. American academy of political and social science, Annals, Jan. 1907, v. 29: 26-34. H1.A4,v.29
National child labor committee. Pamphlet no. 44. 9 p. HD6250.U3N2,no.44
- 1220 ——— The coal mines of Pennsylvania. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 133-138. H1.A4,v.38

- 1221 **Lovejoy, Owen B.** The extent of child labor in the anthracite coal industry. American academy of political and social science, Annals, Jan. 1907, v. 29: 35-49. H1.A4,v.29
National child labor committee. Pamphlet no. 45. 15 p.
HD6250.U3N2,no.45
- 1222 ——— In the shadow of the coal-breaker. Woman's home companion, Sept. 1906, v. 33: 9-11. AP2.W714,v.33
National child labor committee. Pamphlet no. 61. 15 p.
HD6250.U3N2,no.61
- 1223 ——— School-house or coalbreaker. Outlook, Aug. 26, 1905, v. 80: 1011-1019. AP2.O8,v.80
- 1224 **Marot, Helen.** Progress in Pennsylvania: Protection for children in mills and mines. Charities, June 10, 1905, v. 14: 834-836. HV1.C4,v.14
- 1225 **Markham, Edwin.** Children in bondage. New York, Hearst's international library co., 1914. 411 p. 21^{cm}. HD6250.U3M3
The cost of coal, p. 94-113.
- 1226 ——— Little slaves of the coal-mines. Cosmopolitan magazine, Nov. 1906, v. 42: 20-28. AP2.C8,v.42
The hoe-man in the making series.
- 1227 **Mitchell, John.** Proper minimum age for working children. (In Child labor conference. Hartford, Conn., 1908. Report of the proceedings . . . [Hartford] 1909. 22^{cm}. p. 26-32.) HD6250.U4C8 1908
- 1228 **Montessori, Maria.** Children working in mines and dangerous trades. (In International congress of women, London, 1899. London, 1900. 204^{cm}. v. 6, p. 81-82) HQ1106 1899,v.6
Brief outline of address by Madame Montessori, who spoke in Italian.
- 1229 **Nichols, Francis H.** Children of the coal shadow. McClure's magazine, Feb. 1903, v. 20: 435-444. AP2.M2,v.20
Same cond. American review of reviews, Feb. 1903, v. 27: 214-215.
AP2.R4,v.27
- 1230 **Roberts, Peter.** Anthracite coal communities; a study of the demography, the social, educational and moral life of the anthracite regions. New York, The Macmillan company; London, Macmillan & co., ltd., 1904. xiii, 387 p. incl. 2 maps, plan. 22 pl. 23^{cm}. HD8039.M62U65
Our educational apparatus: 1. Schoolhouses in mining towns; 2. The men and women who teach; 3. The boys and girls in school; 4. The boys in the breakers; 5. Can our educational system be improved? p. 151-187.
- 1231 **Seidl, E.** Die Beschäftigung jugendlicher Arbeiter beim Steinkohlenbergbau in Ostrau-Karwin und die damit gemachten Erfahrungen. Zeitschrift für Berg-Hütten und-Salinenwesen im preussischen Staate, 1911, v. 59: 186-212., TN3.Z4,v.59
- 1232 **Waudby, William S.** Children of labor. Frank Leslie's popular monthly, Apr. 1903, v. 55: 545-556. AP2.A346,v.55
- 1233 **Washington, Booker T. Taliaferro.** The man farthest down; a record of observation and study in Europe, by Booker T. Washington, with the collaboration of Robert E. Park. Garden City, N. Y., Doubleday, Page & company, 1912. 4 p. l., 3-390 p., 1 l. fold. map. 204^{cm}. HD4851.W3
Child labour and the sulphur mines, p. 192-216.
Same in Outlook, June 17, 1911, v. 98: 342-349. AP2.O8,v.98

TEXTILES.

- 1234 **Adler, Eleanor H.** Children who weave silk. Child labor bulletin. Nov. 1914, v. 3, no. 3, 52-61. HD6250.U3N4,v.3,no.3
- 1235 **Allen, Carrie W.** Child slaves of the cotton mills. International socialist review, Mar. 1911, v. 11: 521-524. HX1.I6,v.11
- 1236 **Bacon, Mary Applewhite.** The problem of the southern cotton mill. Atlantic monthly, Feb. 1907, v. 99: 224-231. AP2.A8,v.99
- 1236a ——— Child labor in the cotton mills of Georgia. Charities, July 18, 1903, v. 11: 60-61. HV1.C4,v.11
- 1237 **Beeks, Gertrude.** Welfare work and child labor in southern cotton mills. National civic federation review, July-Aug. 1906, v. 2: 14-21. HD4802.N2,v.2
- 1238 **[Brown, Frederic Kenyon]** Through the mill, the life of a mill-boy, by Al Priddy [*pseud.*] Boston, New York [etc.] The Pilgrim press [c1911] xi, 289 p. front., 7 pl. 21^{cm}. HD6250.U3B8
- 1239 **Byington, Margaret F.** Making income equal outgo: what the struggle means to cotton mill workers. Survey, Apr. 19, 1913, v. 30: 109-111. HV1.C4,v.30
- 1240 **Campbell, John C.** From mountain cabin to cotton mill. Child labor bulletin, v. 2, no. 1: 74-84. HD6250.U3N4,v.2
Pamphlet no. 195, 1913. 12 p. HD6250.U3N2,no.195
- 1241 **Chapman, Sydney John.** The Lancashire cotton industry; a study in economic development. Manchester, University press, 1904. 2 p. l., vii p., 1 l., 309, [1] p. 23^{1/2}^{cm}. (Publications of the University of Manchester. Economic series, no. 1) HD9881.7.L2C5
"Select bibliography of authorities": p. 277-304.
Children in factories, p. 85-95.
- 1242 **Cheney, Howell.** Practical restrictions on child labor in textile industries; higher educational and physical qualifications. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 86-99. H1.A4,v.33
National child labor committee. Pamphlet no. 96. 14 p. HD6250.U3N2,no.96
- 1243 **Child workers** in North Carolina cotton mills. Survey, Feb. 27, 1915, v. 33: 573. HV1.C4,v.33
- 1244 **Collet, Clara Elizabeth.** Report by Miss Collet on changes in the employment of women and girls in industrial centres. Pt. 1. Flax and jute centres. Presented to both houses of Parliament by command of Her Majesty. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, 1898. iv, 113 p. 24^{cm}. ([Gt. Brit. Parliament. Papers by command] C. 8794) HD6136.C75
Also found in Gt. Brit. Parliament. Sessional papers, 1898, v. 88. J301.K6 1898, v. 88
- 1245 **Conant, R. K.** Eight-hour day for children in Massachusetts factories. National child labor committee. Pamphlet no. 226.
- 1246 ——— The textile industry and child labor. Child labor bulletin, May, 1913, v. 2, no. 1: 91-95. HD6250.U3N4,v.2
- 1247 **Crosby, Ernest Howard.** Broad-cast. New York, Funk and Wagnalls company, 1905. 126 p. 20^{cm}.
The cotton mill, p. 31-35.

- 1248 **Dawley, Thomas Robinson.** *The child that toileth not; the story of a government investigation.* New York, Gracia publishing company [1912] xii, 490 p. front. (port.) illus. 21¹/₂"^m. HD6250.U3D3
Reviewed by William Leavitt Stoddard. *Survey*, Feb. 15, 1913, v. 26: 765-768.
See also National child labor committee. Pamphlet no. 126. HV1.C4,v.29
- 1249 **Dorr, Mrs. Rheta Childe.** *The twentieth child.* Hampton-Columbian magazine, Jan. 1912, v. 27: 793-806. AP2.H152,v.27
- 1250 ——— *When is a factory not a factory?* Hampton magazine, Feb. 1912, v. 28: 34-49, 63. AP2.H152,v.28
- 1251 **Ellis, Leonora Beck.** *The factory children of Georgia.* Era magazine, July, 1903, v. 12: 49-57. AP2.E8,v.12
- 1252 ——— *A study of southern cotton-mill communities. Child labor. The operatives in general.* American journal of sociology, Mar. 1903, v. 8: 623-630. HM1.A7,v.8
- 1253 **Fahey, Charles P.** *No children in Tennessee factories.* American federationist, Oct. 1901, v. 8: 401. HD8055.A5A2,v.8
- 1254 **Foster, Thomas.** *Observations on the state of the children in cotton mills.* [By Thomas Foster and David McWilliams] London [1825] 15 p. 21¹/₂"^m.
- 1255 **Gérard, Claire.** *Une enquête officielle sur le travail des femmes et des enfants dans les industries textiles aux États-Unis.* Le Musée social, Annales, Oct. 1910, v. 15: 326-329. H3.M8,v.15
- 1256 **Golden, John.** *Children in the textile industry.* American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 42-46. H1.A4,v.35
National child labor committee. Pamphlet no. 127. 5 p. HD6250.U3N2,no.127
- 1257 **Gordon, F. G. B.** *Child labor in textiles decreasing.* Protectionist, Feb. 1915, v. 26: 667-668. HF1750.P8,v.26
- 1258 **Guild, Curtis, jr.** *Child labor and the cotton industry.* Voter, Aug. 1904, v. 2: 16-18. JK1.V6,v.2
- 1259 **Harriman, Mrs. J. Borden.** *The cotton mill a factor in the development of the South.* American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 47-51. H1.A4,v.35
- 1260 **Hine, Lewis W.** *Child or cotton? raising the question of cotton picking in Texas. Photo-story.* [New York city, National child labor committee, 1914?] 6 p. 30¹/₂"^m.
Reprinted from the *Survey*, Feb. 7, 1914, v. 31: 589-592. HV1.C4,v.31
- 1261 ——— *Girl workers in a cotton mill.* [New Orleans] *Survey*, Mar. 14, 1914, v. 31: 737. HV1.C4,v.31
- 1262 ——— *Hiding behind the work certificate.* [Cotton mills of Georgia] *Survey*, Mar. 7, 1914, v. 31: 691. HV1.C4,v.31
- 1263 **Hopkins, Mary Alden.** *New England mill slaves.* Good housekeeping, Sept. 1913, v. 56: 323-330. TX1.G7,v.56
- 1264 **Johnston, John.** *Wastage of child life, as exemplified by conditions in Lancashire.* London, A. C. Fifield, 1909. 95 p. 19¹/₂"^m. (The Fabian socialist series, no. 7) HQ769.J7
"References": p. 94-95.
- 1265 **Kohn, August.** *The cotton mills of South Carolina; a series of observations and facts as published in letters written to the News and courier.* Charleston, S. C., 1903. 40 p. 23¹/₂"^m.

- 1266 **Kohn, August.** The cotton mills of South Carolina, 1907; letters written to the News and courier. Charleston, S. C., Press of the Daggett printing company, 1907. 228 p. 23^{cm}. HD9877.S6K8
"Reprinted from the News and courier, Charleston, S. C., October-December, 1907."
- 1267 **Larcom, Lucy.** An idyl of work. Boston, J. R. Osgood and company, 1875. ix, [11]-183 p. 18^{cm}.
"In her poem, An Idyl of work, Miss Larcom, in her most graceful and popular style, tells the story of her life as a Lowell factory girl."
- 1268 **Lord, Everett W.** Child labor in the textile industries and canneries of New England. American academy of political and social science. Annals, Supplement, Mar. 1909, v. 33: 73-78. H1.A4,v.33
National child labor committee. Pamphlet no. 107. 6 p. HD6250.U3N2,no.107
- 1269 **The Lowell offering.** Written, ed. and pub. by female operatives employed in the mills . . . Lowell, Powers & Bagley; [etc., etc., 1841]-45. 5 v. illus., plates. 21-22 $\frac{1}{2}$ ^{cm}. Monthly. AP2.L88
- 1270 **[Macfadyen] Irene M. Ashby.** Child-labor in southern cotton mills. World's work, Oct. 1901, v. 2: 1290-1295. AP2.W8,v.2
- 1271 **McKelway, A. J.** Child labor and "Education" in southern cotton mills. Woman's home companion, May, 1907, v. 34: 24, 57. AP2.W714,v.34
- 1272 — Child labor in the Carolinas; account of investigations made in the cotton mills of North and South Carolina, by Rev. A. E. Seddon, A. H. Ulm, and Lewis W. Hine, under the direction of the southern office of the National child labor committee. [New York? 1909] [20] p. illus. 23^{cm}. (Pamphlet no. 92) HD6250.U3N2,no.92
- 1273 — Child labor in the southern cotton mills. American academy of political and social science, Annals, Mar. 1906, v. 27: 259-269. H1.A4,v.27
National child labor committee. Pamphlet no. 20. 11 p.; Pamphlet no. 23. 11 p. HD6250.U3N2,no.20;no.23
- 1274 — Child wages in the cotton mills: our modern feudalism. Child labor bulletin, v. 2, no. 1: 7-16. HD6250.U3N4,v.2
National child labor committee. Pamphlet no. 199, 11 p. HD6250.U3N2,no.199
- 1275 — The cotton mill: the Herod among industries. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 39-52. H1.A4,v.38
National child labor committee. Pamphlet no. 162. 15 p. HD6250.U3N2,no.162
- 1276 — The mill or the farm? American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 52-57. H1.A4,v.35
- 1277 — Welfare work and child labor in southern cotton mills. Charities and the commons, Nov. 10, 1906, v. 17: 271-273. HV1.C4,v.17
- 1278 **Maine.** Bureau of industrial and labor statistics. Industrial conditions surrounding women and children in the textile industry. (In its 22d annual report, 1908, p. 1-83) HC107.M2A3 1908
- 1279 **Markham, Edwin.** The child at the loom. Cosmopolitan magazine, Sept. 1906, v. 41: 480-487. AP2.C8,v.41
The hoe-man in the making series.
- 1280 — Spinners in the dark: Child labor in the silk mills. Cosmopolitan, July, 1907, v. 43: 310-314. AP2.C4,v.43
- 1281 **McCore, John Trotwood.** The Bishop of Cottontown; a story of the southern cotton mills. Philadelphia, The J. C. Winston company, 1906. 644 p. col. front., 4 pl. 19 $\frac{1}{2}$ ^{cm}. PZ3.M784B
The theft of a childhood, p. 258-274.

- 1282 **National child labor committee, New York.** The child in the cotton mill. New York city, 1916. 10 p. 23^{cm}. (*Its Pamphlet no. 260, Mar. 1916*)
- 1283 **Nearing, Scott.** The power behind our silk mills. Independent, Feb. 1, 1912, v. 72: 255-256. AP2.I53,v.72
- 1284 **New York (State) Dept. of labor.** Annual industrial directory of New York state. 1st-2d. 1912-1913. Albany, 1913-1914. 2 v. 23^{cm}.
(Contains statistics of children employed in factories. HC107.N7A4
- 1285 **Otey, Mrs. Elizabeth (Lewis).** Children in the cotton industry: a historical sketch. (*In her* The beginning of child labor legislation in certain states; a comparative study. Washington 1910. 23^{cm}. p. 43-72. V. 6 of the U. S. Bureau of labor. Report on condition of woman and child wage-earners in the United States) HD6093.A4,v.6
- 1286 **Palmer, Walter B.** Woman and child workers in cotton mills. American statistical association. Publications, June, 1911, n. s., v. 12: 588-617. HA1.A6,n.s.,v.12
- 1287 **The Proposal to lower the factory age in Lancashire.** New statesman, Aug. 21, 1915, v. 5:465-466. AP4.N64,v.5
- 1288 **Roberts, Peter.** Employment of girls in the textile industry of Pennsylvania. (*In* Commons, John R., ed., Trade unionism and labor problems. Boston, 1905. 21 $\frac{1}{2}$ ^{cm}. p. 423-434) HD6483.C7
"From the Annals, American academy of political science, v. 23, 1904, p. 434-444." H1.A4,v.23
- 1289 **Robinson, Harriet Jane, "Mrs. W. S. Robinson."** Loom and spindle: or, Life among the early mill girls. With a sketch of "The Lowell offering" and some of its contributors. New York, Boston, T. Y. Crowell & company [1898] vii, 216 p. facsim. 18^{cm}. HD6096.L9R7
Child life in the Lowell cotton mills, p. 25-39.
- 1290 **Rochester, Anna, and Florence Taylor.** What the government says about cotton mills. Child labor bulletin, Feb. 1915, v. 3, no. 4: 20-24. HD6250.U3N4,v.3
- 1291 **Sandiford, Peter.** The half-time system in the textile trades. (*In* Sadler, M. E. ed., Continuation schools in England and elsewhere. 2d ed., Manchester, 1908, p. 318-351) LC5215.S25
- 1292 **Sanville, Florence L.** Children and textiles: a record of experience. North American review, Apr. 1909, v. 189: 573-584. AP2.N7,v.189
- 1293 ——— Silk workers in Pennsylvania and New Jersey. Survey, May 18, 1912, v. 28: 307-312. HV1.C4,v.28
- 1294 **Seddon, Alfred A.** The education of mill children in the South. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 72-79. H1.A4,v.32
- 1295 **Swift, W. H.** The last stand of the one business which opposes child labor legislation in the South. Child labor bulletin, May, 1914, v. 3, no. 1: 85-89. HD6250.U3N4,v.3
- 1296 **Taylor, Florence I.** Mortality among cotton operatives. Child labor bulletin, Nov. 1914, v. 3, no. 3: 62-65. HD6250.U3N4,v.3
- 1297 **Thompson, Holland.** From the cotton field to the cotton mill; a study of the industrial transition in North Carolina. New York, London, The Macmillan company, 1906. ix, 284 p. 20^{cm}. HD9877.N8T5
The child in the mill, p. 219-247.

- 1298 **U. S. Bureau of labor.** Report on condition of woman and child wage-earners in the United States. In 19 volumes. Washington, Govt. print. off., 1910-13. 19 v. tables. 23^{cm}. (61st Cong., 2d sess. Senate. Doc. 645)
 I. Cotton textile industry. 1910. 1044 p. HD6093.A4
 IV. The silk industry. 1911. 592 p.
 XIV. Causes of death among woman and child cotton-mill operatives, by Arthur R. Perry. 1912. 430 p.
 XVI. Family budgets of typical cotton-mill workers, by Wood F. Worcester and Daisy Worthington Worcester. 1911. 255 p.
 XVII. Hookworm disease among cotton-mill operatives, by Ch. Wardell Stiles. 1912. 45 p.
- 1299 ——— **Bureau of the census.** Thirteenth census of the United States: 1910. Bulletin. Manufactures: 1909. Statistics for silk manufactures. [Washington, Govt. print. off., 1913] 25 p. incl. tables. 31^{cm}. HD9914.A3 1910
 Contains statistics of the employment of children under 16 years of age.
- 1300 ——— ——— Thirteenth census of the United States: 1910. Bulletin. Manufactures: 1909. Statistics for the manufacture of cotton goods, including cotton small wares. [Washington, Govt. print. off., 1913] 30 p. incl. tables, chart. 31^{cm}. HD9874.A3 1909
 Contains statistics of the employment of children under 16 years of age.
- 1301 **Van Vorst, Bessie, "Mrs. John Van Vorst."** The cry of the children; a study of child-labor, . . . with an introduction by Albert J. Beveridge. New York, Moffat, Yard and company, 1908. xxiii, 9-246 p. 19½^{cm}.
 HD6250.U3V3
- 1302 ——— **and Marie Van Vorst.** The woman who toils; being the experiences of two ladies as factory girls. New York, Doubleday, Page & company, 1903. ix p., 3 l., 303 p. front., plates, ports. 20½^{cm}. HD6068.V2
 "A portion of the material in this book appeared serially under the same title in Everybody's magazine."
 The southern cotton mills. The child in the southern mills: p. 276-303.
- 1303 **Villermé, Louis René.** Tableau de l'état physique et moral des ouvriers employés dans les manufactures de coton, de laine et de soie. Paris, J. Renouard et cie., 1840. 2 v. 22^{cm}. HD8039.T42F89
 Durée journalière du travail, v. 2, p. 83-109; Enfants employés dans les manufactures, v. 2, p. 110-125.
- 1304 **Weltner, C. E.** Social welfare and child labor in South Carolina cotton mill communities. Child labor bulletin, v. 2, no. 1: 85-90.
 HD6250.U3N4,v.2
 National child labor committee, New York. Pamphlet no. 201, 1913. 7 p.
 HD6250.U3N2,no.201
- 1305 **Williams, Talcott.** Child labor and the textile factory. (*In* National association of cotton manufacturers, Transactions, no. 81. 1906. [Boston] 1907. 25^{cm}. p. 302-317) TS1550.N5,no.81
- 1306 **Woolley, R. W.** The mill child's advantages. Pearson's magazine, Mar. 1910, v. 23: 359-367. AP2.P35,v.23
 "The mill child, at least the Southern mill child, has advantages—advantages of good food, education, and better hygienic conditions—ininitely better—than he would have on the farm from which he came."
- 1307 **Young, Thomas M.** The American cotton industry; a study of work and workers, contributed to the Manchester guardian. London, Methuen & co.; New York, C. Scribner's sons, 1902. xvi, 146 p. 19^{cm}. HD9875.Y8

MISCELLANEOUS INDUSTRIES.

- 1308 **Beschäftigung** von jugendlichen Arbeitern und Arbeiterinnen in Werkstätten mit Motorbetrieb (Deutsches Reich). Soziale Rundschau, July, 1910, v. 2, p. 12-19. HD8401.A2 1910.v.2
- 1309 **Bowen, Louise Haddock (de Koven)** "Mrs. J. T. Bowen". The girl employed in hotels and restaurants. By the Juvenile protective association of Chicago. Text by Louise de Koven Bowen. [Chicago] 1912. 21 p. 18^{cm}.
- 1310 **Child slavery** in Chicago [in candy factories] Public policy, Dec. 20, 1902, v. 7: 394. H1.P9,v.7
- 1311 **Dwight, Helen O.** Dangerous machines in the metal trades. Child labor bulletin, Nov. 1914, v. 3, no. 3: 66-75. HD6250.U3N4,v.3
- 1312 **Gesellschaft für Soziale Reform.** Das Verbot der Nachtarbeit jugendlicher Arbeiter in Walz- und Hammerwerken. Soziale Praxis, Oct. 5, 1911, v. 21: 21-22. H5.S7,v.21
- 1313 **Gt. Brit. Children's employment commission.** Second report of the Commissioners. Trades and manufactures. Appendix and index to second report. Presented to both Houses of Parliament by command of Her Majesty. 1843-1845. 4 v. Folded map. 33^{cm}. (Gt. Brit. Parliament. Sessional papers, 1843, v. 13, 14, 15; 1845, v. 42) J301.K6 1843,v.13-15 1845,v.42
- 1314 **Kestner, Fritz.** Die Nachtarbeit jugendlicher Arbeiter in Walzwerken, Hammerwerken und Glashütten. Jahrbücher für Nationalökonomie und Statistik, Sept. 1910, 3. Folge, v. 40: 353-374. HB5.J3,3d ser.v.40
- 1315 **Luettegebrune, Walter.** Die Beschäftigung der jugendlichen Ziegeleiarbeiter nach geltendem Recht. Tonindustrie-Zeitung, Feb. 28, 1914, v. 38: 407-409. TP785.T67,v.33
- 1316 **Markham, Edwin.** The grind behind the holidays. Cosmopolitan magazine, Dec. 1906, v. 42: 143-150. AP2.C8,v.42
The hoe-man in the making series.
- 1317 **The Pittsburgh survey; findings in six volumes, ed. by Paul Underwood Kellogg.** New York, Charities publication committee, 1909-14. 6 v. fronts., plates. 23 $\frac{1}{2}$ ^{cm}. (Russell Sage foundation. [Publications]) HD8085.P6P6
v. 6. Wage-earning Pittsburgh. 1914.
Factory inspection in Pittsburgh, with special reference to the conditions of working women and children, by Florence Kelley: p. 199-216. Sharpsburg: A typical waste of childhood, by Elizabeth Beardsley Butler: p. 279-304.
- 1318 **Price, W. D.** Greasy Olivers. Technical world magazine, Sept. 1913, v. 20: 8-19. T1.T2,v.20
Child labor in the Oliver iron and steel plant in Pittsburgh.
- 1319 **U. S. Bureau of labor.** Report on condition of woman and child wage-earners in the United States. v. 11. Employment of women in the metal trades. Washington, Govt. print. off., 1911. 107 p. 23^{cm}. (61st Cong., 2d sess. Senate Doc. 645. v. 11.) HD6093.A4,v.11
Number and rate of accidents to children: p. 73-76.
- 1320 ——— v. 18. Employment of women and children in selected industries. Washington, Govt. print. off., 1913. 531 p. 23^{cm}. (61st Cong., 2d sess. Senate Doc. 645. v. 18) HD6093.A4,v.18
The following industries have been investigated: Canning and preserving; Cans and boxes, tin; Cigar boxes; Cigarettes; Cigars; Clocks and watches; Confectionery; Core making; Corsets; Crackers and biscuits; Hardware and metal specialties; Hosiery and knit goods; Jewelry; Needles and pins; Nuts, bolts, and screws; Paper boxes; Pottery; Rubber and elastic goods; Shirts, overalls, and underwear; Stamped and enameled ware; Tobacco (smoking and chewing) and snuff; Woolen and worsted goods.
A statement of the general sanitary conditions is given for most of the industries.
Reviewed by Louise C. Odencrantz in Survey, Jan. 24, 1914, v. 31: 496-499. HV1.C4,v.31

- 1321 **Women's educational and industrial union, Boston.** Dept. of research. *The boot and shoe industry in Massachusetts as a vocation for women.* October, 1915. Washington, Govt. print. off., 1915. 109 p. 23^{cm}. (Bulletin of the United States Bureau of labor statistics, whole no. 180. Women in industry series, no. 7) HD8051.A5,no.180

Employment of minors as related to women's earnings in shoe factories: p. 96-98.

STAGE.

- 1322 **Addams, Jane.** Children on the stage. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 60-65. H1.A4,v.38
National child labor committee. Pamphlet no. 165. p. 1-7.
HD6250.U3N2,no.165
- 1323 ——— Stage children. Survey, Dec. 3, 1910, v. 25: 342-343.
HV1.C4,v.25
- 1324 **Barker, Henry A.** Stage children. Survey, Aug. 12, 1911, v. 26: 703-704.
HV1.C4,v.26
- 1325 **Bates, Blanche.** Child labor on the stage. Survey, Aug. 5, 1911, v. 26: 635-636.
HV1.C4,v.26
- 1326 ——— The stage and stage children. New York dramatic mirror, May 3, 1911, v. 65: 5. PN2000.N6,v.65
- 1327 ——— Stage children. New York, National child labor committee, 1912. 7 p. 23^{cm}. (National child labor committee. Pamphlet no. 176)
HD6250.U3N2,no.176
- 1328 **Blydenburgh, Benjamin B.** The child and the theater. Case and comment, Mar. 1912, v. 18: 584-586.
- 1329 **Children barred from the Baltimore stage.** New York dramatic mirror, Jan. 18, 1913, v. 57: 21. PN2000.N6,v.57
- 1330 **Children of the stage.** Facts about illogical laws. New York dramatic mirror, Mar. 15, 1911, v. 65: 8. PN2000.N6,v.65
- 1331 **Children on the Colorado stage.** Survey, Oct. 14, 1911, v. 27: 995.
HV1.C4,v.27
- 1332 **Children readmitted to Louisiana's stage.** Survey, Aug. 10, 1912, v. 28: 629-630.
HV1.C4,v.28
- 1333 **Clark, S. H.** The artist child. (*In* Chicago. Child welfare exhibit, 1911. The child in the city. Chicago, 1912. 22^{cm}. p. 302-309) HV741.C4
- 1334 **Concerning the stage child.** New York dramatic mirror, June 21, 1911, v. 65: 3. PN2000.N6,v.65
- 1335 **Favill, Henry Baird.** Child labor as related to the stage. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 66-73. H1.A4,v.38
National child labor committee. Pamphlet no. 165. p. 8-15.
HD6250.U3N2,no.165
- 1336 **Gordon, Jean M.** Child labor on the stage. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 74-76.
H1.A4,v.38
National child labor committee. Pamphlet no. 165. p. 16-18.
HD6250.U3N2,no.165
- 1337 **Great Britain.** Laws, statutes, etc. An act to prohibit and restrict children and young persons being taken out of the United Kingdom with a view to singing, playing, performing, or being exhibited, for profit. 15th Aug., 1913. [Children (Employment abroad) act, 1913] International labor office, Bulletin, Mar. 1914, v. 9: 12-14. HD7801.I6,v.9

- 1338 Interview with Francis Wilson concerning child actors. New York dramatic mirror, July 9, 1910, v. 64: 5. PN2000.N6,v.64
- 1339 Kelley, Mrs. Florence. Colorado's stage and field children. Survey, Oct. 14, 1911, v. 27: 998. HV1.C4,v.27
- 1340 Krows, A. E. Francis Wilson's definition of the stage child. New York dramatic mirror, Sept. 11, 1912, v. 68: 8. PN2000.N6,v.68
- 1341 Lord, Everett W. Child labor on the stage. Survey, May 21, 1910, v. 24: 317-320. HV1.C4,v.24
- 1342 ——— Children of the stage. National child labor committee, 1910. Pamphlet no. 137a, 31 p. HD6250.U3N2,no.137a
- 1343 Lovejoy, Owen E. Employment of children on the stage. Child labor bulletin, Nov. 1912, v. 1, no. 3, p. 72-82. HD6250.U3N4,v.1
- 1344 MacGowan, K. Liberating the stage child. Theatre, Oct. 1914, v. 20: 173-175, 196. PN2000.T5,v.20
- 1345 Maryland. Bureau of statistics and information. Children on the stage. (In its Report, 1912, p. 46-47; 1913, p. 107-122; 1914, p. 198-214; 1915, p. 130-148.) HC107.M3A15
- 1346 Mason, John. Education of the stage child. New York dramatic mirror, Mar. 8, 1911, v. 65: 5. PN2000.N6,v.65
- 1347 National alliance for the protection of stage children. New York dramatic mirror, Mar. 1, 1911, v. 65: 14. PN2000.N6,v.65
- 1348 Quimby, Harriet. Shall children be barred from the stage? Leslie's weekly July 21, 1910, v. 111: 55. AP2.L52,v.111
- 1349 Reina, Ettore. I pubblici spettacoli e le provvidenze di legislazione sociale . . . Roma, L. Cecchini, 1915. 153 p. 31^{cm}. (Pubblicazioni dell' Ufficio del lavoro, serie B, n. 46)
At head of title: Ministero di agricoltura, industria e commercio. Consiglio superiore del lavoro.
Part I gives the results of an investigation into the employment of children in theatrical performances.
- 1350 Boyle, E. M. A plea for the stage child. New York dramatic mirror, May 24, 1911, v. 65: 5-6. PN2000.N6,v.65
- 1351 Stage children. Dial, Mar. 1, 1911, v. 50: 145-147. AP2.D48,v.50
- 1352 Stage children barred in Louisiana. Survey, Sept. 18, 1909, v. 22: 817. HV1.C4,v.22
- 1353 To save children from the stage. Literary digest, Nov. 12, 1910, v. 41: 797-798. AP2.L58,v.41
- 1354 Why children play in the theaters. Survey, June 10, 1911, v. 26: 401. HV1.C4,v.26
- 1355 Wilson, Francis. Child labor on the stage. Survey, June 18, July 23, 1910, v. 24: 496-498, 635-636. HV1.C4,v.24
- 1356 ——— The child on the stage. Collier's, May 21, 1910, v. 45: 19. AP2.C65,v.45
- 1357 ——— Defending the child actors. Literary digest, Nov. 12, 1910, v. 41: 861. AP2.L58,v.41
- 1358 ——— Persecution of the stage child. New York dramatic mirror, Feb. 1, 1911, v. 65: 5. PN2000.N6,v.65
- 1359 Wolff, Solomon. The child on the stage. National child labor committee New York. 1912. Pamphlet no. 177. 10 p. HD6250.U3N2,no.177

STREET TRADES.

- 50 **Ackroyd, Thomas E.** Child welfare work in Manchester. *Child*, Nov. 1912, v. 3: 158-161. HQ750.A2C4,v.3
Street trading, p. 189.
- 61 **Adams, Myron E.** Children in American street trades. *American academy of political and social science, Annals*, May, 1905, v. 25: 437-458. H1.A4,v.25
National child labor committee. Pamphlet no. 2, p. 25-46. HD6250.U3N2,no.2
- 362 ——— Municipal regulations of street trades. (*In* National conference of charities and correction. *Proceedings*, 1904. [Columbus, O.] 1904. 23^{cm}. p. 294-300) HV88.A3 1904
- 363 **Addams, Jane.** The spirit of youth and the city streets. New York, The Macmillan company, 1909. 6 p. l., 3-162 p. 19^{1/2}cm. HQ796.A3
The spirit of youth and industry, p. 107-135.
- 364 **Adler, Nettie.** Child workers and wage-earners. *Royal society of arts, Journal*, June 12, 1908, v. 56: 738-747. T1.864,v.56
- 1365 ——— Juvenile wage-earners and their work. *Progress*, July, 1908, v. 1: 204-210. HN381.P9,v.1
- 1366 ——— [*and others*]. Boy labour. *Child*, Mar. 1912, v. 2: 522-523. HQ750.A2C4,v.2
- 1367 **Aronvia, B. C.** The newsboy problem in New York city. *Kindergarten primary magazine*, Mar. 1907, v. 19: 483-491. LB1141.K5,v.19
- 1368 **Benedict, Leonard.** Waifs of the slums and their way out. New York, Chicago [etc.] F. H. Revell company [c1907] 234 p. incl. front. Plates, map, chart, tab. 20^{cm}. HV878.B5
The newsboy and his real life, p. 99-115.
- 1369 **Blenk, James H., archbishop.** The child in the street. *Child labor bulletin*, May, 1914, v. 3, no. 1: 52-55. HD6250.U3N4,v.3,no.1
National child labor committee. Pamphlet no. 225. 4 p.
- 1370 **The Bootblack: a city problem.** *Woman's home companion*, Sept. 1907, v. 34: 25. AP2.W714,v.34
- 1371 **Boston. Public schools.** Regulation of street trades in Boston. *School document* no. 15, 1909, p. 34-37; no. 14, 1910, p. 42-44; no. 19, 1910, p. 132-138.
- 1372 **Brown, Edward F.** The demoralizing environment of night messengers in southern cities. *Child labor bulletin*, May, 1913, v. 2, no. 1: 138-141. HD6250.U3N4,v.2
- 1373 ——— The night messenger service: A child labor problem. *Editorial review*, Jan. 1911, v. 4: 31-41. AP2.E26,v.4
- 1374 **Brown, Emma Elizabeth.** The child toilers of Boston streets. Boston, D. Lothrop & co. [1879] 45 p. front., illus., plates. 23^{1/2}cm. HD2350.U5B72
- 1375 **Brown, John George.** [Pictures of street boys. Quoted interview on "street boys"]. *Survey*, June 14, 1913, v. 30: facing p. 364, 380-381. HV1.C4,v.30
- 1376 **Burke, Thomas.** The street-trading children of Liverpool. *Contemporary review*, Nov. 1900, v. 78: 720-726. AP4.C7,v.78
- 1377 **Butler, Elizabeth B.** New Jersey children in the street trades. *Charities and the Commons*, Mar. 16, 1907, v. 17: 1062-1064. HV1.C4,v.17

- 1378 **Campagnac, E. T., and C. E. B. Russell.** The education, earnings, and social condition of boys engaged in street-trading in Manchester. (*In* Gt. Brit. Board of education. Special reports on educational subjects. v. 8. London, 1902. 24 $\frac{1}{2}$ " p. 653-670) L341.A7,v.8
- 1379 **Chicago. Vice commission.** The social evil in Chicago . . . Chicago, Gunthrop-Warren print. co., 1911. 369 p. 24". HQ146.C4V5
Newsboys, street vendors, messenger boys: p. 241-245.
- 1380 ——— **Child welfare exhibit, 1911.** The child in the city; a handbook of the Child welfare exhibit at the Coliseum, May 11-May 25, 1911. [Chicago, The Blakely printing co., 1911] 96 p. illus. 25 $\frac{1}{2}$ ". HQ741.C6
Saving the barren years, p. 26-27.
- 1381 **Chute, Charles L.** Protection for the newsboys and other street workers in Philadelphia . . . Philadelphia, Pennsylvania child labor association, 1912. 10 p. 23 $\frac{1}{2}$ ". (Leaflet no. 30, June 5, 1912)
- 1382 **Clopper, Edward Nicholas.** Child labor in city streets. New York, The Macmillan company, 1912. ix, 280 p. incl. pl. 18". HD6231.C5
Bibliography: p. 245-264.
Reviewed by A. S. Henry in Book news, May, 1912, v. 31: 694. Z1229.B77,v.31
- 1383 ——— **Child labor in street trades.** American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 137-144. H1.A4,v.35
National child labor committee. Pamphlet no. 126. 12 p.
HD6250.U3N2,no.126
- 1384 ——— **The child merchants of the streets.** Child (Lond.) July, 1913, v. 3, 924-926. HQ750.A2C4,v.3
National child labor committee. Pamphlet no. 203. 8 p.
- 1385 ——— **Children on the streets of Cincinnati.** American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 113-132. H1.A4,v.32
National child labor committee. Pamphlet no. 82. 11 p.
HD6250.U3N2,no.82
- 1386 ——— **Effects of street trading on the health of school children.** New York, National child labor committee [1913] 8 p. 23". (Pamphlet no. 218) HD6250.U3N2,no.218
- 1387 ——— **The night messenger boy.** American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 103-104. H1.A4,v.38
- 1388 ——— **Street trades regulation.** Child labor, bulletin, Aug. 1912, v. 1, no. 2, p. 114-118. HD6250.U3N4,v.1,no.2
Child labor laws in all states.
- 1389 ——— **Street work and juvenile delinquency.** New York, National child labor committee [1913] 6 p. 23". (Pamphlet no. 221) HD6250.U3N2
- 1390 ——— **Why overlook the street worker?** Child labor bulletin, May, 1914, v. 3, no. 1: 56-58. HD6250.U3N4,v.3
- 1391 **Conant, Richard K.** Night messenger service. New Boston, Jan. 1911, v. 1: 379-382.
- 1392 ——— **Street trades and reformatories.** American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 105-107. H1.A4,v.38
- 1393 **Davis, Philip.** Child life on the street. (*In* National conference of charities and correction. Proceedings, 1909. Fort Wayne [1909] 23". p. 250-254) HV83.A3 1909

- 1394 **Davis, Philip.** Street-land, its little people and big problems . . . assisted by Grace Kroll; illustrated from photographs. Boston, Small, Maynard & company [c1915] xviii p., 1 l., 291 p. front., plates. 194^{cm}. (Welfare series, ed. by R. T. Hale) HT206.D33
Bibliography: p. 277-291.
- 1395 **Dowdall, H. Chaloner.** The new Liverpool bye-laws regulating street trading. Economic review, Oct. 1899, v. 9: 503-514. HB1.E4,v.9
- 1396 **Dwight, Helen C.** The menace of street trading by children. American city, Jan. 1915, v. 12: 23-24. HT101.A5,v.12
- 1397 **The Employment of children, and street trading.** Child, Nov. 1911, v. 2: 179-180. HQ750.A2C4,v.2
Survey, Feb. 17, 1912, v. 27: 1774. HV1.C4,v.27
Digest of by-laws by the London county council.
- 1398 **Forbush, William Byron.** A western newspaper and its newsboys. [Grand Rapids Evening Press] Charities and the Commons, Oct. 5, 1907, v. 19: 798-802. HV1.C4,v.19
- 1399 **Garnett, William Hubert Stuart.** Children and the law. London, J. Murray, 1911. xiv (i. e. 24), 255 p. 194^{cm}. HV731.G7G3
Street trading, p. 231-234.
- 1400 **German regulation of child labour.** Progress, Jan. 1911, v. 6: 48. HN381.P9,v.6
- 1401 **Goldmark, Josephine C.** Street labor and juvenile delinquency. Political science quarterly, Sept. 1904, v. 19: 417-438. H1.P8,v.19
- 1402 **Goldmark, Pauline.** What Boston has done in regulating the street trades for children. Charities, Feb. 14, 1903, v. 10: 159-160. HV1.C4,v.10
- 1403 **Gt. Brit. Home dept. Committee on employment of school children.** Report of the inter-departmental Committee on the employment of school children, appointed by H. M. principal secretary of state for the Home department . . . [and Minutes of evidence . . . with appendices and index . . .] London, Printed for H. M. Stationery off., by Wyman and sons, limited, 1901-02. 2 v. in 1. fold. diagr. 33^{cm}. ([Gt. Brit. Parliament. Papers by command] Cd. 849, 895) HD6250.G7A4 1901
Appendix no. 36. Memorandum on the regulation of street trading by children at Liverpool and elsewhere. By A. J. Eagleston, p. 411-413.—App. no. 37-38. Report of the Children trading in streets subcommittee of the Liverpool town council [and] form of application for licence. By Capt. J. W. Nott Bower, p. 414-417.—App. 44. A return of street hawkers found in the streets of Manchester, week ended 9th March, 1901. By Robert Peacock, p. 450-455.—App. 45. The education, earnings, and social condition of boys engaged in street-trading in Manchester. By C. E. B. Russell, p. 456-461.—App. 51. Statistics of juvenile offences and offences committed by juvenile street traders in Birmingham. By Charles H. Raftar, p. 470-471.
- 1404 ——— Report of the Departmental committee on the Employment of children act, 1903, appointed by His Majesty's principal secretary of state for the Home department [and Minutes of evidence . . . with appendices and index] Presented to both houses of Parliament by command of His Majesty. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, ltd. [1910] 2 v. in 1. 334^{cm}. ([Parliament. Papers by command] Cds. 5229, 5230) HD6250.G7A4 1910
"The present report is mainly a report on street trading."
- 1405 ——— Royal commission on the poor laws and relief of distress. Report by Mr. Cyril Jackson on boy labour, together with a memorandum from the General post office on the conditions of employment of telegraph messengers. London, Printed for H. M. Stationery off., by Wyman and sons, limited, 1909. iv, 230, 2 p. 33^{cm}. [Parliament. Papers by command] Cd. 4632. HD6250.G7A4 1909a
Appendix, v. 20 to reports of the commission. HV241.H3 1909a,v.20

- 1406 **Gunkel, John Elstner.** Boyville; a history of fifteen years' work among newsboys. Toledo, O., The Toledo newsboys' association [c1905] 7 p. l., [3]-219 p. front., 32 pl. 20^{cm}. HV878.G9
- 1407 "Gunkel" of Toledo. Technical world magazine, Dec. 1913, v. 20: 585-586. T1.T2,v.20
John E. Gunkel. President of the Toledo newsboys association.
- 1408 **Hall, George A.** The newsboy. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 100-102. H1.A4,v.38
- 1409 **Hard, William.** "De kid wot works at night." Everybody's magazine, Jan. 1906, v. 18: 25-37. AP2.E9,v.18
- 1410 **Hartford** regulates child street-trades. Survey, Dec. 31, 1910, v. 25: 511-512. HV1.C4,v.25
- 1411 **Heaton, J. Henniker.** The express letter and the express messenger. Cornhill magazine, Dec. 1910, v. 102: 751-757. AP4.C8,v.102
Living age, Jan. 7, 1911, v. 268: 28-32. AP2.L65,v.268
- 1412 **Hogg, Mrs. Edith F.** Children outside the factory laws. (In International congress of women, London, 1899. London, 1900. 20^{1/2}cm. v. 6, p. 71-76) HQ1106 1899,v.6
- 1413 ——— School children as wage earners. Nineteenth century, Aug. 1897, v. 42: 235-244. AP4.N7,v.42
- 1414 **Ihlder, John.** The Press and its newsboys. World to-day, July, 1907, v. 13: 737-739. AP2.W75,v.13
Evening Press, of Grand Rapids, Mich.
- 1415 **Inglis, William.** Yuxtree-yuxtor! Harper's weekly, Feb. 15, 1913, v. 57 7-8. AP2.H32,v.57
- 1416 **Ireland. Street-trading children committee.** Report of the Inter-departmental committee on the employment of children during school age, especially in street trading . . . in Ireland, appointed by His Excellency the Lord Lieutenant of Ireland, together with minutes of evidence and appendices. Presented to both houses of Parliament by command of His Majesty. Dublin, Printed for H. M. Stationery off., by A. Thom & co. (limited) 1902. xv, 187, [1] p. 33^{1/2}cm. ([Gt. Brit. Parliament. Papers by command] Cd. 1144) HD6250.G8A5 1902
Found also in Gt. Brit. Parliament. Sessional papers, 1902, v. 49. J301.K6 1902,v.49
- 1417 **Johnston, Lettie L.** Street trades and their regulation. (In National conference of charities and correction. Proceedings, Baltimore, 1915. Chicago, 1915. 23^{cm}. p. 518-526) HV88.A3 1915
- 1418 **Kelley, Mrs. Florence.** Some ethical gains through legislation. New York, London, The Macmillan co., 1905. x, 341 p. 19^{cm}. (The citizen's library of economics, politics, and sociology, ed. by R. T. Ely) HN64.K29
Children in street occupations, telegraph and messenger boys: p. 11-26.
- 1419 ——— Standards of life and labor: the standard minimum age for beginning to work for wages. Twentieth century magazine, Nov., Dec. 1911, Feb. 1912, v. 5: 30-34, 104-107, 370-373. AP2.T88,v.5
- 1420 ——— The street trader under Illinois law. (In Chicago. Child welfare exhibit, 1911. The child in the city. Chicago, 1912. 22^{cm}. p. 290-301) HV741.C4
- 1421 ——— Street trades. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 108-110. H1.A4,v.38

- 1422 **Kildare, Owen Frawley.** My Mamie Rose; the story of my regeneration. New York, The Baker & Taylor company [1903] 303 p. incl. map. front. (port.) 4 pl. 20^{cm}. PS3521.I355Z5 1903
A nomad of the streets, p. 43-58.
- 1423 **King, Frederick A.** Influences in street life. (*In* University settlement of society of New York, 1900. Report. 1900. New York, n. d. 22^{cm}. p. 29-32) HV4196.N6U6 1900
- 1424 **Kuechle, B. E.** Newsboys' republic, Milwaukee. Survey, Mar. 22, 1913, v. 29: 859. HV1.C4,v.29
- 1425 **London. County council.** Employment of children and street trading by young persons. By-laws made by the London county council, pursuant to the provisions of sections 1 and 2 of the Employment of children act, 1903. [London, 1911] 2 p. 33^{cm}. HD6250.G67 1911
- 1426 ——— Legal and statutory announcement. Employment of children act, 1903. By-laws. London county council gazette, Aug. 21, 28, 1911, v. 12: 89-90; 118-119. JS3551.L3,v.12
- 1427 **Lord, Everett W.** Child labor in New England. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 31-39. H.A4,v.32
National child labor committee. Pamphlet no. 74. 9 p. HD6250.U3N2,no.74
- 1428 **Lovejoy, Owen R.** Child labor and the night messenger service. Survey, May 21, 1910, v. 24: 311-317. HV1.C4,v.24
National child labor committee. Pamphlet no. 141. 15 p. HD6250.U3N2,no.141
- 1429 ——— Night messenger service. Survey, Dec. 24, 1910, v. 25: 504-505. HV1.C4,v.25
- 1430 ——— Some unsettled questions about child labor. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 49-62. H1.A4,v.33
National child labor committee. Pamphlet no. 108. 14 p. HD6250.U3N2,no.108
- 1431 **McKelway, A. J.** Child labor and crime. (*In* American prison association. Proceedings, 1913, p. 144-154) HV8987.A1 1913
- 1432 ——— Child labor at the national capital. New York city, National child labor committee [1914?] 15 p. 23^{cm}. (National child labor committee. Pamphlet no. 213)
- 1433 **Mangold, George B.** Child welfare and street trades in the United States of America. Child, London, Aug. 1911, v. 1: 956-961. HQ750.A2C4,v.1
- 1434 **Markham, Edwin.** Children in bondage. New York, Hearst's international library co., 1914. 411 p. 21^{cm}. HD6250.U3M3
Perils of the streets, p. 216-251.
- 1435 **Maryland. Bureau of statistics and information.** Newsboy regulations [and street trades] (*In its* Report, 1913, p. 93-106; 1914, p. 191-197) HC107.M3A15 1913,1914
- 1436 ——— ——— Newsboys and other street traders, by Lettie L. Johnston. (*In its* Report, 1915, p. 101-129.) HC107.M3A15 1915
44193°—16—8

- 1437 **Massachusetts child labor committee.** Child scavengers. Report of the Massachusetts child labor committee, January 1, 1915. [Boston, Griffith-Stillings press, 1915] cover-title, 12 p. illus., diagr. 22^{cm}.
HD6250.U4M48 1915
Reviewed in Survey, Jan. 23, 1915, v. 33: 435-436. HV1.C4,v.33
- 1438 **Messenger boys can work at night** [Pennsylvania]. Survey, Jan. 8, 1910, v. 23: 490. HV1.C4,v.23
- 1439 **Messenger boys should have attention.** Editorial review, Jan. 1911, v. 4: 42-43. AP2.E26,v.4
- 1440 **Milwaukee regulates its street trades: Other Wisconsin child labor advances.** Survey, July 31, 1909, v. 22: 589. HV1.C4,v.22
- 1441 **Milwaukee's newsboys' republic.** Outlook, Apr. 5, 1913, v. 103: 743-744. AP2.O6,v.103
- 1442 **National child labor committee, New York.** Child labor laws in all states. New York, National child labor committee [1912] cover-title, 3 l., 124 p. 22^{1/2}cm. (The child labor bulletin, v. 1, no. 2) HD6250.U3N4
HD6243.U5N3
Street trades and their regulation: a symposium [by] Edward N. Clopper, p. 114-118; Zenas L. Potter, p. 119-121; Lillian A. Quinn, p. 122-124.
- 1443 ——— The child workers of the nation. Proceedings of the fifth annual conference, Chicago, Illinois, January 21-23, 1909. New York, 1909. iv, 256 p. 23^{cm}. [Pamphlet no. 94] HD6250.U3N2, no.94
Children engaged in street trades, p. 230-240.
National child labor committee. Pamphlet no. 114 12 p.
- 1444 ——— Street workers. New York, National child labor committee, 1915. 11 p. (Pamphlet no. 246) HD6250.U3N2, no.246
- 1445 **Nearing, Scott.** The city newsboy. Woman's home companion, Oct. 1907, v. 34: 13. AP2.W714,v.34
- 1446 ——— The newsboys at night in Philadelphia. Charities and the Commons, Feb. 2, 1907, v. 17: 778-784. HV1.C4,v.17
- 1447 ——— One district messenger. Independent, Feb. 22, 1912, v. 72: 412-413. AP2.I53,v.72
- 1448 **New South Wales. State children's relief dept.** Street-trading by children. (In its Report, 1909, p. 40-42; 1910, p. 39-40; 1911, p. 42-43; 1912, p. 43-45; 1913, p. 39-41; 1915, p. 54-56.) HV802.N5A3
- 1449 **New York state in the lead: a victory for child labor legislation.** Woman's home companion, Aug. 1907, v. 34: 22. AP2.W714,v.34
Boys who sell papers on the streets, p. 22.
- 1450 **New York's newsboys licensed.** Charities, Sept. 5, 1903, v. 11: 188-189. HV1.C4,v.11
- 1451 **The Newsboy.** v. 1-3. Feb. 1909-Apr. 1910. Pittsburgh, M. D. Hays co., 1909-1910. 2 v. in 3. illus. 25^{1/2}cm. monthly. HV880.N4
- 1452 **[Newsboy-bootblack]** Survey, June 14, 1913, v. 30: 380-381. HV1.C4,v.30
- 1453 **Newsboys' and children's aid society, Washington, D. C.** Annual report. 1889-1892-93. Washington, D. C. 1890-1893. 3 pamphlets. 17-19^{cm}. HV885.W3N5
- 1454 **Newsboys elect their own judge.** Survey, Nov. 26, 1910, v. 25: 312-313. HV1.C4,v.25
- 1455 **News boys' home association, Washington, D. C.** Report. 1863-64. Washington, 1864. 1 pamphlet. HV885.W3N4

- 1456 **Oates, Austin.** Street-trading children and the Act of 1903. Month, Apr. 1911, v. 117: 383-395. AP4.M65,v.117
- 1457 **Paulding, James K.** Enforcing the newsboy law in New York and Newark. Charities, June 10, 1905, v. 14: 836-837. HV1.C4,v.14
- 1458 **Peacock, Robert.** Employment of children with special reference to street trading. (*In* International congress for the welfare and protection of children. 3d, London, 1902. Report of proceedings held in London, 15th-18th, July, 1902. London, 1902. 243^{cm}. p. 191-202) HV707 1902
- 1459 **Philadelphia. Vice commission.** Report. [Philadelphia] 1913. 164 p. 23^{cm}. HQ146.P5A5 1913a
Children on the stage: p. 76-78; Messenger boy service: p. 78-83.
- 1460 **Poole, Ernest.** Child labor—the street. [New York, Child labor committee, n. d.] 28 p. 20^{cm}.
CONTENTS.—The newsboy.—Bootblacks.—Peddlers.
- 1461 ——— Newsboy wanderers are tramps in the making. Charities, Feb. 14, 1903, v. 10: 160-162. HV1.C4,v.10
- 1462 ——— Waifs of the street. McClure's magazine, May, 1903, v. 21: 40-48. AP2.M2,v.21
- 1463 **Porter, H. F. J.** The strike of the messenger boys. Survey, Dec. 10, 1910, v. 25: 431-432. HV1.C4,v.25
- 1464 **Potter, Zenas L.** Street trading and the school. Child labor bulletin, Aug. 1912, v. 1, no. 2, p. 119-121. HD6250.U3N4,v.1,no.2
Child labor laws in all states.
- 1465 **Protection for the child street worker.** School and society, Mar. 6, 1915, v. 1: 350-351.
- 1466 **Quinn, Lillian A.** Enforcement of street trades regulation. Child labor bulletin, Aug. 1912, v. 1, no. 2, p. 122-124. HD6250.U3N4,v.1,no.2
Child labor laws in all states.
- 1467 **Ris, Jacob A.** The New York newsboy. Century magazine, Dec. 1912, v. 85: 247-255. AP2.C4,v.85
- 1468 **Russell, Charles E. B.** City lads. Child, London, Apr. 1911, v. 1: 587-594. HQ750.A2C4,v.1
- 1469 ——— Some reflections on Home office schools and juvenile street trading. Charity organisation review, Nov. 1910, n. s., v. 28: 322-335. HV1.C6,n.s.,v.28
- 1470 **Sherard, Robert Harborough.** The child-slaves of Britain. London, Hurst and Blackett, limited, 1905. 3 p. l., [ix]-xix p., 2 l., 267, [1] p. 8 pl. 21^{cm}.
On street trading, p. 247-249; On street gambling, p. 250-251. HD6250.G7S4
- 1471 **[Smith, Elizabeth Oakes, "Mrs. Seba Smith."]** The newsboy. New York, J. C. Derby; Boston, Phillips, Sampson & co.; [etc., etc.] 1854. 527 p. front. 184^{cm}. PZ3.S6459N
- 1472 **Spargo, John.** The bitter cry of the children, with an introduction by Robert Hunter. New York, London, The Macmillan company, 1906. xxiii, 337 p. front., plates, facsim., diagrs. 20^{cm}. HV713.S7
Street trades, p. 184-188, 258-260.
- 1473 **Stelzle, Charles.** Boys of the street; how to win them. New York, Chicago [etc.] F. H. Revell company [1904] 96 p. 19^{cm}. HV878.S8
- 1474 **Stowe, Lyman Beecher.** Boy judges in a boys' court. Outlook, Mar. 1, 1913, v. 103: 495-496. AP2.O8,v.103
- 1475 **Street trades and delinquency.** Survey, May 20, 1911, v. 26: 285. HV1.C4,v.26

- 1476 **Terhune, Leola Benedict.** The Greek bootblack. Survey, Sept. 16, 1911, v. 26: 852-854. HV1.C4,v.26
- 1477 **U. S. Bureau of labor.** Report on condition of woman and child wage-earners in the United States. v. 8. Juvenile delinquency and its relation to employment. Washington, Govt. print. off., 1911. 177 p. 23^{cm}. (61st Cong. 2d sess. Senate. Doc. 645, v. 8) HD6093.A4,v.8
- 1478 ——— **Immigration commission.** Abstract of the report on the Greek padrone system in the United States. Washington, Govt. print. off., 1911. 24 p. 23⁴cm.
- 1479 ——— **The Greek padrone system in the United States.** (*In its Reports*, 1911, v. 2: 387-408) JV6417.CO7,v.2
- 1480 **Urwick, Edward Johns, ed.** Studies of boy life in our cities, written by various authors for the Toynbee trust. London, J. M. Dent & company, 1904. xv, 320 p. 19⁴cm. HQ775.U83
- Cloete, J. G. The boy and his work. I. The general conditions of boy labour. II. Special occupations; messenger-boys, office-boys, van-boys, and street traders, p. 102-138.
- 1481 **Verwendung von Kindern beim Strassenhandel (England)** Soziale Rundschau, Aug. 1910, v. 2, p. 245-247. HD8401.A2 1910,v.2
- From Board of trade labour gazette, July, 1910.
- 1482 **Washington university, St. Louis.** St. Louis school of social economy. The newsboy of Saint Louis; a study. Saint Louis, Missouri. [St. Louis, 1913?] cover-title, 15 p. 23^{cm}. HD6247.N5W2
- Prepared by the Research department of the School of social economy and pub. by the Alumni association.
- Based upon a report made by Miss Ina Tyler, in 1910.
- 1483 **Waugh, Benjamin.** Street children. Contemporary review, June, 1888, v. 53: 825-835. AP4.C7,v.53
- 1484 **What of the newsboy of the second cities?** Charities, Apr. 11, 1903, v. 10: 368-371. HV1.C4,v.10
- 1485 **Williams, Mornay.** The street boy—who he is, and what to do with him. (*In National conference of charities and correction. Proceedings*, 1903, p. 238-244) HV88.A3 1903
- 1486 **Willows, Maurice.** The nickel theatre. American academy of political and social science, Annals, Supplement, July, 1911, v. 38: 95-99. H1.A4,v.38
- 1487 **Winship, A. E.** John E. Gunckel of Toledo, the newsboys' evangelist. World to-day, Nov. 1908, v. 15: 1169-1173. AP2.W75,v.15
- 1488 **Wisconsin. Bureau of labor and industrial statistics.** Fifteenth biennial report, 1911-1912. Part III. The newsboys of Milwaukee, by Alexander Fleisher. Madison, Democrat printing company, 1911. 61-96 p. 23^{cm}. Bibliography: p. 94-96. HD6247.N5W7
- 1489 ——— **Laws, statutes, etc.** Street trades law. [Madison, 1911?] 5 p. 23^{cm}. HD6250.U4W6 1911a
- 1490 **Womer, Parley P.** The church and the labor conflict. New York, Macmillan company, 1913. 302 p. 20^{cm}. HD6338.W7
- Street trades: p. 173-174.
- 1491 **Woolston, Florence.** Our untrained citizens. Survey, Oct. 2, 1909, v. 23: 21-35. HV1.C4,v.23
- 1492 **Work with boys.** v. 14, no. 5-v. 15, no. 10, May, 1914-Dec. 1915. Reading, Pa., Pub. by William McCormick, 1914-1915. 23^{cm}.
- 1493 **Wright, Livingston.** The Boston newsboys' trial board. Case and comment, Feb. 1913, v. 19: 586-589.

EDUCATIONAL ASPECTS.

- 1494 Addams, Jane.** Child labor and education. (*In* National conference of charities and correction. Proceedings, 1908. Fort Wayne, Ind., 1908. 23^{cm}. p. 364-369) HV88.A3 1908
- 1495 ———** Democracy and social ethics. New York, The Macmillan company; [etc., etc.] 1902. ix, 281 p. 19^{1/2}cm. (The citizen's library of economics, politics, and sociology, ed. by R. T. Ely) HN64.A2
Child labor, p. 40-46, 167-170; Educational methods, p. 187-220.
- 1496 ———** Standards of education for industrial life. (*In* National conference of charities and correction. Proceedings, 1911. Fort Wayne, 1911. 23^{cm}. p. 162-164) HV88.A3 1911
- 1497 Adler, Nettie.** Child workers and wage-earners. Royal society of arts. Journal, June 12, 1908, v. 56: 738-747. T1.S64,v.56
- 1498 ———** School children as wage-earners. Contemporary review, July, 1914, v. 106: 77-86. AP4.C7,v.106
- 1499 American academy of political and social science, Philadelphia.** Industrial education. Philadelphia, American academy of political and social science, 1909. iii, [1], 224 p. 26^{cm}. (The Annals of the American academy of political and social science. vol. xxxiii, no. 1) H1.A4,v.33,no.1
- 1500 American federation of labor.** Industrial education; consisting of an investigation and report by a competent special committee; reports of officers and committees; action of A. F. of L. convention; the attitude of organized labor and others toward the problem . . . 1st ed. Washington, D. C., American federation of labor, 1910. 68 p., 1 l. 23^{1/2}cm. LC1081.A6
- 1501 ———** Committee on industrial education. Industrial education. Comp. and ed. by Charles H. Winslow. Washington [Govt. print. off.] 1912. 114 p. 23^{cm}. ([U. S.] 62d Cong., 2d sess. Senate. Doc. 936) T73.A7
- 1502 Astor, Waldorf.** Boy labour and education. National review, Apr. 1913, v. 61: 358-366. AP4.N25,v.61
- 1503 [Barnard, Henry]** Legal provision respecting the education and employment of children in factories, &c.; with examples of improvement in manufacturing districts. Education and labor; or, The influence of education on the quality and value of labor; and its connection with insanity and crime. Hartford, Printed by Case, Tiffany & Burnham, 1842. 4, 52, 32 p. 23^{cm}.
HD6321.B3
- 1504 Beckwith, Holmes.** German industrial education and its lessons for the United States. Washington, Govt. print. off., 1913. 154 p. 23^{cm}. (U. S. Bureau of education. Bulletin, 1913, no. 19. Whole no. 529)
"List of references": p. 149-152. L111.A6 1913,no.19
- 1505 Best, Robert Hall, and C. K. Ogden.** The problem of the continuation school and its successful solution in Germany; a consecutive policy. London, P. S. King & son, 1914. xv, 79 [1] p. front., plates. 21^{1/2}cm.
- 1506 Beveridge, William Henry.** Unemployment; a problem in industry. 3d ed. London, New York [etc.] Longmans, Green and co., 1912. xv, [1], 405 p. incl. tables, diagrs. 23^{1/2}cm. HD5706.B6 1912
"Blind-alley" occupations, p. 125-126, 212-214.
Juvenile labour exchange, p. 213.
Boy labour, p. 125-131, 212, 285-290.
Memorandum by the Board of trade with regard to cooperation between labour exchanges and local education authorities, p. 285-290.
- 1507 Bloomfield, Meyer, ed.** Readings in vocational guidance. Boston, New York [etc.] Ginn and company [1915] xii, [3], 723 p. diagrs. 21^{1/2}cm. HF5381.B48

- 1508 **Bloomfield, Meyer.** *The school and the start in life; a study of the relation between school and employment in England, Scotland, and Germany.* Washington, Govt. print. off., 1914. 143 p. 23^{cm}. (U. S. Bureau of education. Bulletin, 1914, no. 4. Whole no. 575) HF5381.B5
Bibliography: p. 133-142. L111.A6 1914, no. 4
- 1509 ——— *The vocational guidance of youth.* Boston, New York [etc.] Houghton Mifflin company [*1911] xii p., 2 l., 123, [1] p., 1 l. 18^{cm}. (Riverside educational monographs, ed. by H. Suzsallo) HF5381.B6
"References": p. 117-[120]
- 1510 ——— *Youth, school, and vocation.* Boston, New York [etc.] Houghton Mifflin company [*1915] xi p., 1 l., 273 p. forms., diag. 19^{cm}.
Bibliography: p. 262-267. HF5381.B63
- 1511 ——— *and Laura F. Wentworth.* *The vocational counsellor in action.* Survey, May 3, 1913, v. 30: 183-188. HV1.C4,v.30
- 1512 ——— *and others.* *The school, the child, and the job.* City club, Philadelphia. City club bulletin, Dec. 27, 1912, v. 6: 95-119. JS1261.C47,v.6
- 1513 **Bray, B. A.** *The apprenticeship question.* Economic journal, Sept. 1908, v. 19: 404-415. HB1.E3,v.19
- 1514 ——— *Boy labour and apprenticeship.* (In *Daily news year book*, 1911. London, 1911. 19^{cm}. p. 257-261) AY755.L8D2 1911
- 1515 **Brereton, Cloudealey.** *Co-operation between the school and the employer.* Contemporary review, Feb. 1914, v. 105: 227-235. AP4.C7,v.105
- 1516 **Brown, H. Maughan.** *Schoolboys as wage earners.* Child, London, Sept. 1912, v. 2: 1026-1030. HQ750.A2C4,v.2
- 1517 **Burke, Thomas.** *Wage-earning school children in England.* Forum, May, 1902, v. 33: 283-292. AP2.F8,v.33
- 1518 **Busser, Ralph C.** *The German system of industrial schooling.* Philadelphia, Public education association, 1913. 63 p. 23^{cm}. (Public education association study, no. 40) T123.B75
- 1519 **Campagnac, E. T. and C. E. B. Russell.** *The school training and early employment of Lancashire children.* London, 1903. iii, 39 p. 24^{cm}. (Gt. Brit. Board of education. Special reports on educational subjects, Supplement to v. 8) L341.A7,v.8,suppl.
- 1520 **Canada.** *Royal commission on industrial training and technical education.* Report. Ottawa, C. H. Parmelee, 1913. 4 v. illus. 24^{cm}. ([Parliament, 1912-1913] Sessional paper no. 191d. A. 1913) T76.A4
- 1521 **Cape of Good Hope.** *Laws, statutes, etc. Laws regulating the relative rights and duties of masters, servants, and apprentices in the Cape Colony, including the Workmen's compensation act, 1905. Annotated with decisions under the different sections.* By H. Tennant. [Revised up to date] [Cape Town] J. C. Juta & co., 1906. 2 p. l., 136 p. 22^{cm}.
- 1522 **Capen, Edward Warren.** *The historical development of the poor law of Connecticut.* New York: The Columbia university press, The Macmillan company, agents; London, P. S. King & son, 1905. 520 p. 25^{cm}. (Studies in history, economics, and public law, ed. by the Faculty of political science of Columbia university, v. 22) H31.C7,v.22
Laws regulating education and employment of minors, p. 444-451.
- 1523 **Chapman, Sydney John.** *Work and wages, in continuation of Lord Brassey's "Work and wages" and "Foreign work and English wages." Part III. Social betterment.* London, New York [etc.] Longmans, Green and co., 1914. viii, 382 p. 23^{cm}. HC255.B762,v.3
Training and boy and girl labour: p. 151-209.

- 1524 **Chenery, William L.** Children out of school and without work. Child, Chicago, May, 1913, v. 2: 21-22. HQ750.A2C3,v.2
- 1525 **Cherouny, Henry [William]** The burial of the apprentice; a true story from life in a union workshop, and other essays on present political and social problems. New York, The Cherouny print. & pub. co., 1900. 193, [1] p., 1 l. 8°. HD8072.C4
- 1526 **Chesser, Elizabeth Sloan.** Half-timers in the factories. Westminster review, Oct. 1909, v. 172: 406-409. AP4.W5,v.172
- 1527 **Child labor and child illiteracy.** Chautauquan, Sept. 1912, v. 68: 10-11. AP2.C48,v.68
- 1528 **Child labor and the schools in Austria.** Journal of political economy, Mar. 1905, v. 13: 303-306. HB1.J7,v.13
- 1529 **City club of Chicago.** A report on vocational training in Chicago and in other cities. Chicago, City club of Chicago, 1912. 315 p. 24½" LC1045.C5
- 1530 **Clopper, Edward N.** Child labor and compulsory education in rural Kentucky. National child labor committee. New York. 1909. Pamphlet no. 120. 15 p. HD6250.U3N2,no.120
- 1531 ——— The education of factory children in the South. National child labor committee, New York. 1911. Pamphlet no. 172. 8 p. HD6250.U3N2,no.172
- 1532 ——— Heckling the schools. Child labor bulletin, May, 1914, v. 3, no. 1: 148-152. HD6250.U3N4,v.3,no.1
- 1533 **Columbia typographical society, Washington, D. C.** Apprentices to the printing business. [Report of committee on that subject] Washington, 1835. sheet. 47½ x 15½" fold. to 16 x 12". Z120.C72
- 1534 **Compulsory part-time schooling.** Journal of education, Feb. 20, 1913, v. 77: 206-207. L11J5,v.77
- 1535 **Compulsory school attendance.** Washington, Govt. print. off., 1914. 137 p. 23". (U. S. Bureau of education. Bulletin, 1914, no. 2. Whole no. 573) L111.A6 1914,no.2
- CONTENTS.—i. Compulsory attendance laws in the United States, by W. S. Deffenbaugh.—ii. Compulsory attendance in foreign countries, by Anna T. Smith.—iii. Compulsory education in Germany, by W. C. Ryan, jr.—iv. The need of compulsory education in the South, by W. H. Hand.—v. Laws of Ohio and of Massachusetts relating to compulsory attendance and child labor.—vi. Bibliography.
- 1536 **Conant, Richard K.** The educational test for working children. Child labor bulletin, v. 1, no. 1, June, 1912, p. 145-148. HD6250.U3N4,v.1
- 1537 **Cooley, Edwin Gilbert.** Vocational education in Europe: report to the Commercial club of Chicago. Chicago, The Commercial club of Chicago, 1912-15. 2 v. fronts. (v. 2, port.) plates, double chart. 23½". Bibliography: v. 1, p. 7; v. 2, p. 7-8. LC1047.G3C6
- 1538 **Craighead, Erwin.** Compulsory education and the southern states. Sewanee review, Jan. 1908, v. 16: 306-308. AP2.S5,v.16
- 1539 **Cranston, Mary Rankin.** Child wage-earners in England: why the "half-time" system has failed to solve the problem. Craftsman, July, 1907, v. 12: 424-430. N1.C87,v.12
- 1540 **Cunnington, B.** Apprenticeship. Charity organisation review, July, 1905, n. s. v. 18: 39-47. HV1.C8,n.s.,v.18
- 1541 **Dabney, Charles W.** Child labor and the public schools. American academy of political and social science, Annals, Jan. 1907, v. 29: 110-114. H1.A4,v.29
- National child labor committee. Pamphlet no. 53. 5 p. HD6250.U3N2,no.53

- 1542 **Dean, Arthur Davis.** The worker and the state; a study of education for industrial workers. New York, The Century co., 1910. 355 p. 20^{cm}.
"Bibliography of vocational education": p. 345-355. T73.D3
- 1543 **Dearie, Norman Burrell.** Industrial training with special reference to the conditions prevailing in London. London, P. S. King & son, 1914. xiii 506 p. 22^{cm}. (Studies in economics and political science . . . no. 39 in the series of monographs by writers connected with the London school of economics and political science) T107.D35
- 1544 **Dooley, L. W.** The educational scrap heap and the blind alley job. Scientific American supplement, Mar. 13, 1915, v. 79: 170-171. T1.S52,v.79
- 1545 **Dorr, Mrs. Rheta Childe.** The twentieth child. Hampton-Columbian magazine, Jan. 1912, v. 27: 793-806. AP2.H153,v.27
- 1546 **Draper, Andrew S.** Conserving childhood. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 1-14. H1.A4,v.33
National child labor committee. Pamphlet no. 100. 14 p.
HD6250.U3N2,no.100
- 1547 **Dunlop, Olive Jocelyn.** English apprenticeship and child labour; a history with a supplementary section on the modern problem of juvenile labour, by O. Jocelyn Dunlop and Richard D. Denman. London [etc.] T. F. Unwin, 1912. 3 p. l., 9-390 p., 1 l. 23^{cm}. HD4885.G7D8
Bibliography: p. 355-363.
Reviewed by J. H. Clapham in English historical review, Jan. 1913, v. 28: 164-166.
DA20.E58,v.28
- 1548 **Dutton, Samuel Train, and David Snedden.** The administration of public education in the United States. New York, The Macmillan company, 1908. viii p., 1 l., 601 p. 20^{1/2}cm. LB2305.D9
Compulsory education and child labor legislation: p. 492-510; Educational statistics: p. 535-558.
- 1549 **Ellis, Leonora B.** Educating southern factory children. Gunton's magazine, May, 1903, v. 24: 259-270. H1.G9,v.24
- 1550 **Die Erhebung über Erwerbsarbeit von Schulkindern in Dänemark.** Germany Statistisches Amt. Abteilung für Arbeiterstatistik. Reichs-Arbeitsblatt, Mar. 1912, v. 10: 210-215. HD8441.A3,v.10
- 1551 **Flexner, Mary.** A plea for vocational training. Survey, Aug. 7, 1909, v. 22: 650-655. HV1.C4,v.22
- 1552 **France. Commission de l'enseignement professionnel.** Rapport et notes. Paris, Imprimerie impériale, 1865. 4 p. l., [3]-186 p. 31^{1/2}cm. T121.A3 1865a
- 1553 ——— **Conseil général de l'agriculture, des manufactures et du commerce.** Notice sur la législation relative aux dessins de fabrique. Session des Conseils généraux de l'agriculture, des manufactures et du commerce. 1841-1842. Paris, Imprimerie royale, 1841. 26, 23, 7 p. 24^{cm}. [With its Procès-verbaux. Paris, 1838] HC271.A2 1837-8
- 1554 ——— **Conseil supérieur du travail.** Apprentissage: rapport de M. Briat au nom de la commission permanente. Enquête et documents. Paris, Imprimerie nationale, 1902. 2 p. l., xlviii p., 2 l., 489 p. 27x21^{cm}. HD4885.F8A2
- 1555 ——— **Direction du travail.** L'apprentissage industriel; rapport sur l'apprentissage dans les industries de l'ameublement. Paris, Imprimerie nationale, 1905. xxiii, 655 p. plates. 24^{cm}. HD4885.F8A3

- 1556 **France. Direction du travail.** Rapport sur l'apprentissage dans l'imprimerie, 1899-1901. Paris, Imprimerie nationale, 1902. xcvi, 320 p. 25^{cm}.
Z122.5.F7 1902
- 1557 ———— Rapport sur l'apprentissage dans l'industrie de l'horlogerie. Paris, Imprimerie nationale, 1911. xviii, 290 p. 23^{cm}.
HD4885.F8A4
- 1558 ———— **Laws, statutes, etc., 1906-1913 (Falières)** . . . Proposition de loi sur l'organisation de l'apprentissage par les cours de perfectionnement, (renvoyée à la Commission du commerce et de l'industrie) présentée par M. Gustave Dron, député. [Paris, Martinet, imprimeur de la Chambre des députés, 1909] 41 p. 26^{1/2}^{cm}. (Chambre des députés. 9. législ. sess. 1909, no. 2601. Annexe au Procès-verbal . . . 24 juin 1909)
HD4885.F8D8
- 1559 ———— Same. [Paris, Martinet, imprimeur de la Chambre des députés, 1911] 85 p. 26^{1/2}^{cm}. (Chambre des députés. 10. législ. sess. 1911, no. 795. Annexe au Procès-verbal . . . 27 février 1911) HD4885.F8D82
- 1560 **Fraser, Patrick Fraser, lord.** Treatise on the law of Scotland relative to master and servant and master and apprentice. 2d ed. Edinburgh, T. & T. Clark, 1872. xix, 818 p. 25^{cm}.
Appendix of statutes: p. [481]-727.
- 1561 **From school to job in Philadelphia.** Survey, Apr. 19, 1913, v. 30: 98-100.
HV1.C4,v.30
- 1562 **Germany. Kommission für Arbeiterstatistik.** . . . Bericht über die Erhebung betreffend die Arbeitszeit, Kündigungsfristen und die Lehrlingsverhältnisse im Handelsgewerbe. Berlin, C. Heymanns Verlag, 1896. 2 p. l., 36 p. 32^{1/2}^{cm}. (Verhandlungen. nr. 8.)
HD8441.A53
- 1563 **Giddings, Franklin H.** The social and legal aspect of compulsory education and child labor. (In National education association. Journal of proceedings and addresses . . . 1905. Winona, Minn., 1905. 23^{1/2}^{cm}. p. 111-113)
L13.N4 1905
- 1564 **Gilman, Charlotte P.** Child labor in the schools. Independent, May 21, 1908, v. 64: 1135-1139.
AP2.I53,v.64
- 1565 **Gray, Benjamin Kirkman.** A history of English philanthropy, from the dissolution of the monasteries to the taking of the first census. London, P. S. King & son, 1905. xv, 302 p. 22^{cm}.
HV245.G77
Child labour and education, p. 101-123.
- 1566 **Gt. Brit. Board of education.** Abstract of school attendance bye-laws in force in England and Wales on 1st January, 1910. London, Printed for H. M. Stationery off., by Wyman and sons, limited, 1910. 32 p. 24^{cm}.
LB2584.A4
- 1567 ———— Annual report of the chief medical officer of the Board of education . . . 1911-1914. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, ltd., 1912-1915. 4 v. 25^{cm}. [Parliament. Papers by command]
LB3413.G6A2
1911: Medical inspection and juvenile employment: p. 245-268.
1912: Medical inspection and juvenile employment: p. 309-327.
1913: The examination of leavers: II. Relation to juvenile employment: p. 271-284.
1914: Juvenile employment and the war; Examination of leavers; employment of school children out of school hours: p. 223-239.
- 1568 ———— Correspondence relating to school attendance between the Board of education and certain local education authorities since the outbreak of the war. London, H. M. Stationery off., Eyre & Spottiswoode, 1915. 19 p. 33^{1/2}^{cm}. (Gt. Brit. Parliament. Papers by command. Cd. 7803)

- 1569 **Gt. Brit. Board of education. Consultative committee.** Report of the Consultative committee on attendance, compulsory or otherwise, at continuation schools. Presented to Parliament by command of His Majesty. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, Ltd., 1909. 2 v. 24½". ([Parliament. Papers by command] Cd. 4757-4758) LC5556.G6A7
- 1570 ——— **Office of special inquiries and reports.** Memorandum on compulsory attendance at school in certain European countries and American states. London, Printed under the authority of H. M. Stationery off., by Eyre and Spottiswoode, Ltd., 1913. 75 p. 24". (Imperial education conference papers. II) LC129.A3 1913
- 1571 ——— **Board of trade. Sea fishing trade committee.** Report of a committee appointed under a minute of the Board of trade, to inquire into and report whether any and what legislation is desirable with a view to placing the relations between the owners, masters, and crews of fishing vessels on a more satisfactory basis. Together with the minutes of evidence taken on the inquiry. Presented to both houses of Parliament by command of Her Majesty. London, Printed by G. E. B. Eyre and W. Spottiswoode, for H. M. Stationery off., 1883. xxi, 237, [1] p. 33". ([Parliament. Papers by command] C. 3432) HD8039.F65G7
- 1572 ——— **Education dept. Elementary schools (children working for wages).** Return (in part) to an order of the honourable the House of commons, dated 28 April 1898; for, return "for England and Wales, giving (1) the number of children attending elementary schools who are known to be working for wages" . . . and, "(2) the different classes of employment into which the boys and girls attending elementary schools in England and Wales went on leaving school during some complete year . . ." Ordered, by the House of commons, to be printed, 1 June [and 9 February] 1899. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, 1899. 2 v. 24½". ([Parliament, 1899. H. of C. Reports and papers] 205, 23) HD6250.G67 1899
Also found in Gt. Brit. Parliament. Sessional papers, 1899, v. 75. J301.K6 1899, v. 75
- 1573 ——— **Return "showing the number of half timers in the inspected schools of each county of England and Wales . . . in the year ending 31st day of August 1896 (in continuation of Appendix E of the Report of the Departmental committee on school attendance and child labour, 1893)"** Ordered, by the House of Commons, to be printed, 8 February 1898. 4 p. 33". (Gt. Brit. Parliament. Sessional papers, 1898. v. 70) J301.K6 1898, v. 70
- 1574 ——— **Home dept.** Report of departmental committee appointed to inquire into the conditions of school attendance and child labour. Ordered, by the House of Commons, to be printed 6 July, 1893. 46 p. 33". (Gt. Brit. Parliament. Sessional papers, 1893-04. v. 68) J301.K6 1893-04, v. 68
Reports on foreign countries: France, Germany, Switzerland, p. 30-33.
- 1575 ——— **Inter-departmental committee on partial exemption from school attendance.** . . . Report of the Inter-departmental committee on partial exemption from school attendance . . . Presented to both houses of Parliament by command of His Majesty. London, Printed for H. M. Stationery off., by J. Truscott & son, Ltd., 1909. 2 v. in 1. tables. 33". ([Parliament. Papers by command] Cd. 4791, 4887) HD6250.G7A4 1909
Also found in Gt. Brit. Parliament. Sessional papers, 1909, v. 17. J301.K6 1909, v. 17
- 1576 **Greenwood, Arthur.** Blind-alley labour. Economic journal, June, 1912, v. 22: 300-314. HB1.E3, v. 22

- 1577 **Hall, Fred S.** Scholarships for working children. [New York, 1908] 4 p. 23^{cm}. (National child labor committee. Pamphlet no. 85)
HD6250.U3N2,no.85
Reprinted from *Charities and the commons* 11-14-1908.
- 1578 **Hall, George A.** Scholarships. American academy of political and social science, *Annals, Supplement*, July, 1911, v. 38: 77-79. H1.A4,v.38
- 1579 **Hall, Granville Stanley.** Adolescence; its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion, and education. New York, D. Appleton and company, 1904. 2 v. illus. 25^{cm}. HQ26.H2
- 1580 **Hampke, Thilo.** Der Befähigungsnachweis im Handwerk. Jena G. Fischer, 1892. viii, 192 p. 24^{cm}. (Sammlung nationalökonomischer und statistischer Abhandlungen des Staatswissenschaftlichen Seminars zu Halle a. d. S., hreg. von Dr. Joh. Conrad . . . 8. Bd. 1. Hft.) HD4895.H23
- 1581 **Hand, William H.** Compulsory education and the southern states. *Sewanee review*, July, 1908, v. 16: 298-306. AP2.S5 v.16
- 1582 ——— Need of compulsory education in the South. National child labor committee, New York. 1913. Pamphlet no. 192. 16 p.
HD6250.U3N2,no.192
- 1583 **Hanus, Paul H.** Industrial education in Massachusetts. *Charities and the Commons*, Oct. 5, 1907, v. 19: 820-823. HV1.C4,v.19
- 1584 **Harvey, Lorenzo D.** The need, scope, and character of industrial education in the public-school system. (In *National education association. Journal of proceedings and addresses*, 1909. Winona, Minn., 1909. 234^{cm}. p. 49-70)
L13.N4 1909
- 1585 **Hedges, Anna Charlotte.** Wage worth of school training; an analytical study of six hundred women-workers in textile factories. New York city, Teachers college, Columbia university, 1915. 173 p. 234^{cm}. (Teachers college, Columbia university. Contributions to education, no. 70)
LC1503.H4
- 1586 **Hine, Lewis W.** A school which opens at six o'clock in the morning. [Huntsville, Ala.] *Survey*, Feb. 21, 1914, v. 31: 637. HV1.C4,v.31
- 1587 **Hoehfelder, Julius.** Attendance officer, examination instruction, truant officer. 450 questions and answers. Reports, school and legal forms, rules for attendance officers, causes of truancy, views of distinguished educators, compulsory education law, newsboy, child labor and mercantile laws, New Jersey and Chicago specimen questions. Answers to previous exam. questions. New York, Civil service chronicle, 1914. cover-title, 82 p., 1 l. illus. (port.) 25^{cm}. LB3081.H6
- 1588 **Hogg, Mrs. Edith F.** School children as wage earners. Nineteenth century, Aug. 1897, v. 42: 235-244. AP4.N7,v.42
- 1589 **Hutchinson, Woods.** Overworked children on the farm and in the school. American academy of political and social science, *Annals, Supplement*, Mar. 1909, v. 53: 116-121. H1.A4,v.33
National child labor committee. Pamphlet no. 105. 6 p.
HD6250.U3N2,no.105
- 1590 **Indiana. Commission on industrial and agricultural education.** Report made pursuant to the provisions of chapter 152, laws of 1911. December, 1912. Indianapolis, W. B. Burford, 1912. 133 p. 224^{cm}. LC1046.I4A4
- 1591 **Is compulsory law merciless?** *Journal of education*, Oct. 30, 1913, v. 78: 429. L11.J5,v.78

- 1592 **Jackson, Cyril.** Apprenticeship and the training of the workman. Edinburgh review, Oct. 1912, v. 216: 411-427. AP4.E3,v.216
- 1593 **Jevons, H. Winefrid.** The industrial training and placing of juveniles in England. Journal of political economy, Mar. 1913, v. 21: 243-254. HB1.J7,v.21
- 1594 ——— The relation of schools to employment in the United States. London, Eyre & Spottiswoode, 1914. 225 p. fold. table. 24 $\frac{1}{2}$ cm. (Gt. Brit. Board of education. Special reports on educational subjects, v. 28) L341.A7,v.28
Some recent American reports dealing with the relation of the schools to employment: p. 196-199. Appendix I. The school system of Gary, Indiana, by R. H. Crowley; p. 190-210; Appendix II. A note on vocational schools in the far west, by Hilda Wilson: p. 211-225.
- 1595 **Johnston, John.** Wastage of child life, as exemplified by conditions in Lancashire. London, A. C. Fifield, 1909. 95 p. 19cm. (The Fabian socialist series, no. 7) HQ769.J7
The half-time system: p. 63-70.
- 1596 **Kelley, Mrs. Florence.** Laws for the children's welfare. An ideal attainable in 1920: Child labor; Compulsory education. (In National education association, Journal of proceedings and addresses . . . 1908. Winona, Minn., 1908. 23 $\frac{1}{2}$ cm. p. 1222-1228) L13.N4 1908
- 1597 ——— Scholarships for working children. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 100-103. H1.A4,v.33
National child labor committee. Pamphlet no. 106. 4 p. HD6250.U3N2,no.106
- 1598 **Kennedy, James B.** Does South Carolina need a compulsory school system? Charities and the Commons, Feb. 13, 1909, v. 21: 961-964. HV1.C4,v.21
- 1599 **Kingsbury, Susan M.** What is ahead for the untrained child in industry? Charities and the Commons, Oct. 5, 1907, v. 19: 808-813. HV1.C4,v.19
- 1600 **Kirkland, James H.** The school as a force arrayed against child labor. American academy of political and social science, Annals, May, 1905, v. 25: 558-562. H1.A4,v.25
National child labor committee. Pamphlet no. 2, p. 146-150; Pamphlet no. 3. 8 p. HD6250.U3N2,no.2;no.3
- 1601 **Lapp, John A., and Carl H. Mote.** Learning to earn; a plea and a plan for vocational education. Indianapolis, The Bobbs-Merrill company [1915] 9 p. l., 421 p. 19 $\frac{1}{2}$ cm. LC1045.L3
Bibliography: p. [379]-389.
"Organisations interested in vocational training": p. [391]-394.
- 1602 **Leake, Albert H.** Industrial education, its problems, methods, and dangers. Boston and New York, Houghton Mifflin company [1913] xi, 205 p. incl. forms, diagrs. 21cm. (Hart, Schaffner & Marx prize essays, xv) LC1081.L3
"List of authorities consulted": p. 196-198.
- 1603 **Leavitt, Frank M.** Cooperation of the schools in reducing child labor. Child labor bulletin, May, 1914, v. 3, no. 1: 141-147. HD6250.U3N4,v.3
National child labor committee. Pamphlet no. 231. -14 p. T61.V5,v.3
Vocational education, May, 1914, v. 3: 344-350.
- 1604 ——— Examples of industrial education. Boston, New York [etc.] Ginn and company, [1912] viii, 330 p. 20cm. LC1081.L4
Contains bibliographies.
- 1605 **Leonard, Robert J.** Some facts concerning the people, industries, and schools of Hammond and a suggested program for elementary, industrial, prevocational, and vocational education. Hammond, Ind., 1915. 1 p. l., v-viii, 165 p. diagrs. 23cm. LA285.H3L3

- 1606 Lewis, Ervin E.** Work, wages, and schooling of eight hundred Iowa boys in relation to the problems of vocational guidance. Iowa City, Iowa, 1915. [34] p. 23^{cm}. (University of Iowa. Extension bulletin no. 9)
HF5381.L45
- 1607 Lindsay, Samuel McCune.** Child labor and the public schools. American academy of political and social science, Annals, Jan. 1907, v. 29: 104-109.
H1.A4,v.29
National child labor committee. Pamphlet no. 52. 6 p.
HD6250.U3N2,no.52
- 1608 Logue, Charles H.** A successful apprenticeship system in a large plant; development of the boy the chief aim—production secondary. American machinist, Apr. 21, 1910, v. 33: 723-724.
TJ1.A5,v.33
- 1609 London. County council.** Legal and statutory announcement. Employment of children act, 1903. By-laws. London county council gazette, Aug. 21, 28, 1911, v. 12: 89-90; 118-119.
JS3551.L3,v.12
- 1610 ——— Education committee.** The apprenticeship question. Report of the section of the Education committee appointed to consider the question of apprenticeships. London, Printed for the London County council, 1906. cover-title, 45 p. 33^{cm}. (London. County council. [Publication] no. 925)
HD4885.G7L8
"Sources of information": p. 45.
- 1611 ——— Report on eight years of technical education and continuation schools (mostly evening work) in two parts.** London, Printed for the London County council, by J. Truscott and son, ltd. [1912] cover-title, 120 p. diagrs. (part fold.) 33^{cm}.
T173.L83A4 1912a
- 1612 ——— Education dept.** Training and employment of boys in the building trades in London. Report by education officer submitting a report by Mr. J. C. Smail, organizer of trade schools for boys, on the training and employment of boys in the building trades in London. [London, Printed for the London County council by J. Truscott and son, ltd., 1914] 2 p. l., 26 p. 19 charts. 33^{1/2}cm.
TH64.L6A5 1914
- 1613 ——— Technical education board.** Report of the special sub-committee on the building trades. (Adopted by the Technical education board, 20th February, 1899) London, Printed by J. Truscott and son [1899] cover-title, xii, 63 p. 33^{cm}.
T107.A47 1899
- 1614 Lord, Everett William.** Child labor and the public schools. New York [The Emerson publishing co., Ansonia, Conn.] 1909. 12 p. 23^{cm}. (National child labor committee. Pamphlet no. 93)
HD6250.U3L8
- 1615 ——— Child labor and trade schools.** (In Child labor conference. Hartford, Conn., 1908. Report of the proceedings . . . [Hartford] 1909. 22^{cm}. p. 23-26)
HD6250.U4C8 1908
- 1616 ——— Inadequate schools.** American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 33-34.
H1.A4,v.35
- 1617 Louisiana needs school law too.** Survey, Oct. 30, 1909, v. 23: 138-139.
HV1.C4,v.23
- 1618 Lovejoy, Owen R.** Child labor and compulsory education. (In Southern sociological congress, Nashville, Tenn., 1912. The call of the new South . . . Nashville, 1912. 23^{1/2}cm. p. 67-83)
HN79.A2S7 1912
- 1619 ——— Child labor and education.** Survey, Feb. 17, 1912, v. 27: 1780-1784.
HV1.C4,v.27

- 1620 **Lovejoy, Owen B.** Child labor vs. the conservation of school children. (*In* American academy of medicine. Conservation of school children. Papers and discussions of a conference at Lehigh University, 1912. Easton, Pa., 1912. 24^{cm}. p. 63-70) LB3403 1912b
Discussion: p. 70-72.
- 1621 ——— *Same.* Child, Chicago, Sept. 1912, v. 1: 23-26. HQ750.A2C3,v.1
- 1622 ——— The function of education in abolishing child labor. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 80-91. HL.A4,v.32
National child labor committee. Pamphlet no. 77. 12 p. HD6250.U3N2,no.77
- 1623 ——— School-house or coalbreaker. Outlook, Aug. 26, 1905, v. 80:1011-1019. AP2.O8,v.80
- 1624 ——— Vocational guidance and child labor. Child labor bulletin, Nov. 1913, v. 2, no. 3: 60-69. HD6250.U3N4,v.2,no.3.
- 1625 ——— Vocational guidance and child labor. With a review of survey of girls at work in Wilkesbarre, Pa. National child labor committee, New York. Pamphlet no. 244. March 1915. 15 p. HD6250.U3N2,no.244
Reprinted from Child labor bulletin, v. 3, no. 4.
- 1626 ——— Will trade training solve the child-labor problem? North American review, June, 1910, v. 191: 773-784. AP2.N7,v.191
Cond. in American review of reviews, July, 1910, v. 42: 95-96. AP2.R4,v.42
- 1627 **McKelway, A. J.** Child labor and "Education" in southern cotton mills. Woman's home companion, May, 1907, v. 34: 24, 57. AP2.W714,v.34
- 1628 **McMillan, Margaret.** Child labour and the half-time system. London, The "Clarion" newspaper company, limited, 1896. cover-title, 12 p. 21^{cm}. (Clarion pamphlet, no. 15) HN389.C6
- 1629 ——— The economic aspects of child labour and education. London, P. S. King & son [1905?] cover-title, 16 p. diagrs. 21³/₄^{cm}. (National liberal club political and economic circle. Transactions, vol. v., pt. 9) HD6250.G7M3
- 1630 **Maine. Committee on industrial education.** Report of the Committee on industrial education. 1910. Augusta, Kennebec journal print, 1910. 2 p. l., [3]-72 p. fold. diagr. 22³/₄^{cm}. T74.M2A4 1910
Bibliography: p. 70-72.
- 1631 **Mansie, Alexander.** The apprenticed labourer's manual; or, An essay on the apprenticeship system, and the duties of the apprenticed labourers, including several of the personal and relative duties binding on mankind in general. British Guiana, Society for the instruction of the labouring classes, 1837. xiii, [1], 215, [2], 13 p. 23^{cm}. HD4881.M2
- 1632 **Marshall, Florence M.** The public school and the girl wage earner. Charities and the Commons, Oct. 5, 1907, v. 19: 848-851. HV1.C4,v.19
- 1633 **Martin, George H.** Child labor and compulsory education: the school aspect. (*In* National education association. Journal of proceedings and addresses . . . 1905. Winona, Minn., 1905. 23¹/₄^{cm}. p. 103-111.) L13.N4 1905
- 1634 **Maryland. Commission on industrial education.** Report of the Commission to make inquiry and report to the Legislature of Maryland respecting the subject of industrial education, 1908-1910. (Chapter 367, laws of 1908) Baltimore, Md., G. W. King ptg. co., state printers [1910]. 121 p. front., plates, ports. 23^{cm}. T74.M3A4 1910

- 1635 **Massachusetts. Board of education.** 75-77th annual reports, 1911, 1912, 1913. Boston, Wright & Potter print co., 1911-1913. 23^{cm}.
L160.B15 1911-1913
Massachusetts state-aided vocational schools. Charles A. Prosser. 1910-1911, p. 48-65.
Massachusetts state-aided vocational education. 1911-1912, p. 119-129.
Vocational education: State-aided education. 1912-1913, p. 151-159.
- 1636 ——— **A special report on the needs and possibilities of part-time education.** January, 1913. Boston, Wright & Potter printing co., state printers, 1913. 164 p. 23^{cm}.
LC5252.M3A2
- 1637 ——— **Bureau of statistics of labor.** The apprenticeship system. Part I of the annual report for 1906. Pages 1 to 86. Boston, Wright & Potter printing co., 1906. cover-title, 85 p. 23^{1/2}cm.
HD4885.U5M3
- 1638 ——— **Commission on industrial and technical education.** Report of the Commission on industrial and technical education. Submitted in accordance with resolve approved May 24, 1905. April, 1906. Boston, Wright & Potter printing co., state printers, 1906. 2 p. l., 196 p. 23^{1/2}cm.
T74.M4A5
Contents.—Report of the Commission.—Report of the subcommittee on the relation of children to the industries.—Appendices: 1. Industrial education in Europe. 2. Address before the Commission . . . by Sir Wm. Mather. 3. Address before the Commission . . . by E. Swaysland. 4. Letter to the Commission . . . by C. F. Warner.
- 1639 ——— **Commission on industrial education.** Bulletin . . . no. 1-6. Boston, Wright & Potter printing co., state printers, 1907. 6 v. 23^{cm}.
T74.M4A7
Contents.—1. Industrial continuation schools, Munich. Jewelers' and gold and silver workers' apprentices. 2. Male commercial employees. 3. Machinists' apprentices. 4. Mechanics' apprentices. 5. Bookbinders' apprentices. 6. Gardeners' apprentices.
- 1640 **Michigan. State commission on industrial and agricultural education.** Report . . . to the governor, superintendent of public instruction, and commissioner of labor. Lansing, December, 1910. [n. p., printed by the commission, 1910?] 85 p.
- 1641 **Miles, H. E.** Pennsylvania's new compulsory continuation schools. American industries, Nov. 1915, v. 16: 28-29.
HD4802.A6,v.16
- 1642 **Milton, George F.** Compulsory education and the southern states. Sewanee review, Jan. 1908, v. 16: 25-42.
AP2.S5,v.16
- 1643 ——— **Compulsory education in the South.** American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 57-66.
H1.A4,v.32
National child labor committee. Pamphlet no. 75. 10 p.
HD6250.U3N2,no.75
- 1644 **Motley, James Marvin.** Apprenticeship in American trade unions. Baltimore, The Johns Hopkins press, 1907. vii, 9-122 p. 24^{1/2}cm. (Johns Hopkins university studies in historical and political science . . . Series xxv, nos. 11-12)
HD4885.U5M8
- 1645 **Moulder, Priscilla E.** The half-timer. World's work (London) Oct. 1911, v. 18: 496-504.
AP4.W85,v.18
- 1646 **Muensterberg, Hugo.** Vocational guidance. (In University settlement society of New York. 25th annual report, 1911. [New York] 1912. 22^{1/2}cm. p. 30-37)
HV4196.N6U6 1911
- 1647 **Munsick, Samuel H.** Apprentice instruction in the Manila Bureau of printing: a description of a new system of coöperative vocational training and what it has accomplished. Manila, Bureau of printing, 1913. cover-title, 1 p. l., 22 p. illus. (part. col.) 26^{cm}.
Z122.5.P6M 1913
Reprinted from the Philippine craftsman, November, 1912. (Second printing)

- 1648 **Nation** (London) [Editorial] The waste of child labor. *Nation* (London) Feb. 28, 1914, v. 14: 891-892. AP4.N15,v.14
- 1649 **National association of manufacturers of the United States of America. Committee on industrial education.** Industrial education, continuation and trade schools, apprenticeship, state and local control, pre-vocational courses in elementary schools. Report of the Committee on industrial education, H. E. Miles, chairman, at the seventeenth annual convention, New York city, May 21, 1912 . . . [n. p., 1912] 39 p. 23x10^{cm}. (No. 28) T61.N25 1912
- 1650 ——— *Same.* H. E. Miles, chairman, at the eighteenth annual convention. Detroit, Michigan, May 21, 1913. New York, N. Y. [1913] 29 p. 23x10^{cm}. (National association of manufacturers of the United States of America . . . [Bulletin] no. 34) T73.N17
"Vocational education in Wisconsin, by H. E. Miles": p. 23-29.
- 1651 ——— *Same.* H. E. Miles, chairman, at the twentieth annual convention, New York city, May 25, 1915. New legislation in Pennsylvania and Wisconsin. New York city, Issued from the Secretary's office [1915] 30 p. Reprinted for distribution by Bureau of education, Washington, D. C.
- 1652 **National child labor committee, New York.** Child labor and education. New York, National child labor committee [1912] cover-title, 3 l., 223 p. diags. 23^{cm}. (The child labor bulletin, v. 1, no. 1) HD6250.U3N4
CONTENTS.—National aid to education, by Felix Adler.—A substitute for child labor, by P. P. Claxton.—Child labor and vocational work in the public schools, by E. O. Holland.—Child labor and vocational guidance, by Helen T. Woolley.—Child labor and the future development of the school, by C. G. Pearce.—The dangers and possibilities of vocational guidance, by Alice P. Barrows.—Relation of industrial training to child labor, by W. E. Elson.—Economic value of education, by M. Edith Campbell.—Need of compulsory education in the South, by W. H. Hand.—A federal children's bureau, by A. J. Peters.—Federal aid to education a necessary step in the solution of the child labor problem, by S. McC. Lindsay.—Part time schools, by Florence Kelley.—Social cost of child labor, by J. P. Frey.—Child labor and democracy, by A. J. McKelway.—Extending medical inspection from schools to mills, by G. F. Ross, M. D.—Child labor in the canneries of New York state, by Z. L. Potter.—How to interest young people, by Mrs. Frederick Crane.—The educational test for working children, by R. K. Conant.—A legislative program for South Carolina, by J. P. Hollis.—Rejuvenation of the rural school, by Ernest Burnham.—Rural child labor, by J. M. Gillette.—Symposium: Unreasonable industrial burdens on women and children, by Florence Kelley, Millie R. Trumbull, J. A. Ryan, Jean M. Gordon.—Report of the general secretary for seventh fiscal year.—Proceedings of the eighth annual conference.
- 1653 **National conference on vocational guidance.** 2d, New York, 1912. Proceedings. New York, October 23 to 26, 1912, under the auspices of the Central committee on vocational guidance. New York, The Secretary, 1913. vii, 206 p. 23½^{cm}.
For 3d and 4th conferences see nos. 1658 and 1659 in this list.
- 1654 **National education association. Committee on the place of industries in public education.** Report. (*In its Journal of proceedings and addresses*, 1910. Winona, Minn., 1910. 23½^{cm}. p. 652-777) L13.N4 1910
Historical statement; The industrial factor in social progress, by Frank T. Carlton; The industrial factor in education, by Ernest N. Henderson; History of industrial education in the United States, by Charles R. Richards; Selected bibliography, by Howard D. Brundage.
- 1655 ——— **Dept. of manual training. Committee on vocational education and vocational guidance.** Report . . . [at the] Salt Lake city meeting, July 7-11, 1913. [n. p., 1913?] 30 p.
Also published in Journal of proceedings and addresses, 1913, p. 573-580. L13.N4 1913
- 1656 **National society for the promotion of industrial education.** Bulletin no. 1-20. New York city, National society for the promotion of industrial education, 1907-1915. 20 pamphts. 23^{cm}. T61.N27

- 1657 National society for the promotion of industrial education.** Proceedings of annual meeting, 1st-8th, 1908-1914. New York city, National society for the promotion of industrial education, 1908-1915. 8 v. 23^{cm}. (*Its* Bulletin no. 5-6, 9, 10, 13, 15, 16, 18, 20) T61.N27
- 1658 National vocational guidance association.** Vocational guidance; papers presented at the organization meeting of the Vocational guidance association, Grand Rapids, Mich., October 21-24, 1913. Washington, Govt. print. off., 1914. 94 p. 23^{1/2}^{cm}. (U. S. Bureau of education. Bulletin, 1914, no. 14. Whole no. 587) L111.A6 1914,no.14
- 1659 ———** Proceedings of . . . the fourth national conference on vocational guidance, held at Richmond, Va., Dec. 7-9, 1914. [Grand Rapids] Pub. by the assoc., 1915. 64 p.
- 1660 Nearing, Scott.** Child labor and the child. Education, Mar., Apr. 1910, v. 30: 407-415, 494-499. L11.E2,v.30
- 1661 New Jersey. Commission on industrial education.** Report submitted to the Senate and General assembly of the state of New Jersey, in accordance with joint resolution no. 11, approved April 14, 1908. Trenton, MacCrellish & Quigley, state printers, 1909. 177 p. 22^{1/2}^{cm}. T69.N46
Issued also in "Governor's message transmitting report of the Commission on industrial education."
- 1662 New York (State) Bureau of labor statistics.** 26th report, 1908. Part I. Industrial training, a report on conditions in New York state, by Charles R. Richards. Albany, State department of labor, 1909. vi, 394 p. 23^{cm}. HC107.N7A3 1908,pt.1
A selected bibliography on industrial education: p. 357-394.
- 1663 ——— Education dept. Attendance division.** Digest of compulsory education and child labor laws as amended by laws of 1913, with annotations, department rulings and legal forms for the use of school authorities, attendance officers and teachers. Rev. ed. with index, comp. by James D. Sullivan. Albany, N. Y., 1913. 32 p. 23^{cm}. (University of the state of New York bulletin. no. 540) HD6243.U6N7 1913
- 1664 ———** A summary of the compulsory attendance and child labor laws of the states and territories of the United States, comp. by James D. Sullivan. Albany, New York state education dept., 1907. cover-title, 1 p. l., 5-112 p. 23^{cm}. (New York state library. Bulletin 114. Legislation 34) Z881.N61BL,no.34
- 1665 Noyes, William.** Overwork, idleness, or industrial education? American academy of political and social science, Annals, Mar. 1906, v. 27: 342-353. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 84-95; Pamphlet no. 32. 2d ed. 1907. 12 p. HD6250.U3N2,no.20;no.20a;no.32
- 1666 Nudd, Howard W.** How New York city registers its children. Survey, Feb. 17, 1912, v. 27: 1777-1780. HV1.C4,v.27
- 1667 Ogburn, William Fielding.** Progress and uniformity in child-labor legislation; a study in statistical measurement. New York, Columbia university; [etc., etc.] 1912. 219 p. incl. tables, diagrs. 25^{cm}. (Studies in history, economics and public law, ed. by the Faculty of political science of Columbia university, vol. XLVIII, no. 2, whole no. 121) H31.C7,vol.48,no.2
Educational requirements: p. 128-143. HD6243.U5O5
- 1668 [O'Leary, Wesley Alvah]** Short-unit courses for wage earners and a factory school experiment. April, 1915. Washington, Govt. print. off., 1915. 93 p. 23^{cm}. (Bulletin of the United States Bureau of labor statistics, whole no. 159. Miscellaneous series, no. 6) HD6051.A62,no.159

- 1669 **Pæuw, Léon de.** La coopération des instituteurs primaires allemands à la loi d'empire sur le travail des enfants. *Revue sociale catholique*, Mar. 1911, v. 15: 133-143. H3.R5,v.15
- 1670 **Page, Arthur W.** Training for the trades; the next step in public school work. *World's work*, Feb. 1907, v. 13: 8552-8557. AP2.W8,v.13
- 1671 **Parker, Lewis W.** Compulsory education, the solution of the child labor problem. *American academy of political and social science, Annals, Supplement*, July, 1908, v. 32: 40-56. H1.A4,v.32
- 1672 **Perrin, John W.** Indirect compulsory education: the factory laws of Massachusetts and Connecticut. *Educational review*, Apr. 1906, v. 31: 383-394. L11.E5,v.31
- 1673 **Philippine Islands.** Bureau of printing. A brief description of the Bureau of printing plant, its productions and apprentice instruction. The government of the Philippine Islands. 1915. [Manila, Bureau of printing, 1915] 19 p. illus. 20 $\frac{1}{2}$ "^{cm}. Z232.P54B
- 1674 **Polltzer, Johann.** Die Lage der Lehrlinge im Klein Gewerbe in Wien. Tübingen und Leipzig, J. C. B. Mohr, 1900. 2 p. l., 132 p. 24"^{cm}. (Wiener staatswissenschaftliche Studien. 2. Bd., 3. Hft.) HB41.W6
- 1675 **Puffer, Joseph Adams.** Vocational guidance; the teacher as a counselor . . . Chicago, New York [etc.] Rand, McNally & company [1914] 306 p. incl. front, illus., diagrs. 19"^{cm}. HF5381.P8
- 1676 **Reed, Mrs. Anna Y.** Seattle children in school and in industry with recommendations for increasing the efficiency of the school system and for decreasing the social and economic waste incident to the employment of children 14 to 18 years of age. Seattle, Wash., Board of school directors, 1915. 103 p. 19 $\frac{1}{2}$ "^{cm}. HD6250.U5S65
- 1677 **Reigart, John F.** Enforcement of school attendance in London. Survey, Oct. 23, 1909, v. 23: 123-125. HV1.C4,v.23
- 1678 **Rhode Island.** Commissioner of public schools. Special report of the commissioner of public schools relating to industrial education as authorized by a resolution of the General assembly, approved April 20, 1911. Providence, E. L. Freeman company, printers to the state, 1911. 102 p. 23 $\frac{1}{2}$ "^{cm}. T74.R4A5 1911
- 1679 **Sadler, Michael Ernest.** Continuation schools in England & elsewhere; their place in the educational system of an industrial and commercial state. Manchester, University press, 1907. xxvi, 779 p. incl. fold. tables, diagrs. fold tab. 23"^{cm}. (Publications of the University of Manchester. Educational series, no. 1) LC5215.S25
"Short bibliography": p. 750-754.
- 1680 **Savoy, Émile.** L'apprentissage en Suisse. Louvain, C. Peeters; [etc., etc.] 1910. viii, 616 p. incl. tables. 24"^{cm}. (École des sciences politiques et sociales de Louvain) HD4885.S9S3
"Bibliographie": p. 597-616.
- 1681 **Schaeffer, Nathan C.** Child labor and the public schools. *American academy of political and social science, Annals*, Jan. 1907, v. 29: 84-86. H1.A4,v.29
National child labor committee. Pamphlet no. 51. 3 p. HD6250.U3N2,no.51
- 1682 **Schneider, Herman.** The public school and the day's work. *American academy of political and social science, Annals, Supplement*, July, 1911, v. 38: 53-59. H1.A4,v.38
National child labor committee. Pamphlet no. 164. 8 p. HD6250.U3N2,no.164

- 1683 **Scott, Jonathan French.** Historical essays on apprenticeship and vocational education. [Ann Arbor, Mich.] Ann Arbor press, 1914. 96 p. 23^{cm}.
Bibliography: p. [83]-96. HD4885.G7S4
- 1684 **Seddon, Alfred A.** The education of mill children in the south. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 72-79. H1.A4,v.32
- 1685 **Snedden, David.** Child labor. Compulsory attendance. (In Monroe, Paul, ed. A cyclopedia of education. New York, 1911. 27⁴cm. v. 1, p. 607-611; 285-295) LB15.M6,v.1
- 1686 **Spalding, John L.** Child labor. The meaning and worth of education. (In Minnesota. Bureau of labor. Ninth biennial report, 1903-04. Minneapolis, 1904. 23⁴cm. v. 1, p. 69-83) HC107.M6A2 1903-04
- 1687 **Spaulding, F. E.** Problems of vocational guidance. (In National education association. Proceedings and addresses, 1915. Ann Arbor, Mich. p. 331-335.) L13.N4 1915
- 1688 **Stephens, George Asbury.** Influence of trade education upon wages. Chicago, 1911. 1 p. l., p. 17-35. 24⁴cm. HD4885.U5S7
Reprinted from the Journal of political economy, v. xix, no. 1, p. 17-35. HBIJ7,v.19
- 1689 **Trade scholarships for boys, 1912.** London county council gazette, Nov. 13, 20, 1911, v. 12: 304; 321. JS3551.L3,v.12
- 1690 **U. S. Bureau of labor.** Industrial education. Washington, Govt. print. off., 1911. 822 p. 23⁴cm. (Twenty-fifth annual report of the commissioner of labor. 1910) HD8051.A3 1910
"Selected bibliography on industrial education": p. 519-539.
- 1691 ——— **Report on condition of woman and child wage-earners in the United States.** v. 7. Conditions under which children leave school to go to work. Washington, Govt. print. off., 1910. 309 p. 23^{cm}. (61st Cong. 2d sess. Senate. Doc. 645. v. 7) HD6093.A4,v.7
- 1692 ——— **Commission on national aid to vocational education.** Vocational education. Report together with the Hearings held on the subject, made pursuant to the provisions of Public resolution no. 16, Sixty-third Congress (S. J. res. 5) Washington, Govt. print. off., 1914. 2 v. 23^{cm}. (63d Cong., 2d sess. House. Doc. 1004) T73.A5 1914
- 1693 ——— **Congress. House. Committee on the District of Columbia.** Report of hearings of March 13 and 16, 1906, on S. 1243, providing for compulsory education in the District of Columbia; and H. R. 375, and 5974, to regulate child labor in the District of Columbia . . . Washington, Govt. print. off., 1906. 62 p. 23^{cm}. LC132.D6A3
- 1694 **Urwiek, Edward Johns, ed.** Studies of boy life in our cities, written by various authors for the Toynbee trust. London, J. M. Dent & company, 1904. xv, 320 p. 19⁴cm. HQ775.U83
Urwiek, E. J. The boy's physique and physical training: The boy's mind and education . . . Home, school, and street, p. 255-318.
- 1695 **Vaiden, V.** Agricultural development and vocational education. Financial age, June 27, 1914, v. 29: 1139-1140. HG1.F4,v.29
- 1696 **Vocational guidance survey, New York.** Report of the Vocational guidance survey, by Alice P. Barrows . . . [New York] 1912. 15 p. 22⁴cm. (Bulletin no. 9. Public education association of the city of New York) LC1045.V6
Reprinted from the fourteenth Annual report of the city superintendent of schools. New York city.

- 1697 **Watson, Frank D.** What the scholarships are doing. *Woman's home companion*, Aug. 1907, v. 34: 22. AP2.W714,v.34
- 1698 **Weaver, Eli W.** Getting in touch with the employer. *Journal of education*, Apr. 10, 1913, v. 77: 396-398. L11J5,v.77
- 1699 **Welpton, W. P.** Primary artisan education. New York, Bombay [etc.] Longmans, Green and co., 1913. xix, [1], 252 p. 19¹cm.
- 1700 **Weyl, W. E., and A. M. Sakolaki.** Conditions of entrance to the principal trades. U. S. Bureau of labor. Bulletin, Nov. 1906, no. 67: 681-780. HD8051.A5,no.67
- 1701 **White, Frank Marshall.** School children who want to work. *Harper's weekly*, June 17, 1911, v. 55: 24. AP2.H32,v.55
- 1702 **Whittemore, Gilbert E.** The Providence school census system. *American academy of political and social science. Annals, Supplement*, Mar. 1910, v. 35: 130-133. H1.A4,v.35
- 1703 **Winalow, Charles Henry.** Report on the relations of European industrial schools to labor. Boston, Wright & Potter printing co., state printers, 1908. 22 p. 23^{cm}. (Massachusetts commission on industrial education. Bulletin no. 10) T74.M4A7,no.10
- 1704 **Wisconsin. Commission upon the plans for the extension of industrial and agricultural training.** Report of the Commission . . . submitted to the governor January 19, 1911 . . . Madison, Wis., Democrat printing company, state printer, 1911. 135 p. 23^{cm}. S534.W6A5 1911
- 1705 ——— **State board of industrial education.** Bulletin, no. 1-7. Madison, 1912. 7 v.
- CONTENTS.—1. Laws of Wisconsin relating to employment of women and children, industrial education and truancy, by C. P. Cary. LB2529.W6
2. Wisconsin legislation governing industrial and continuation education, by H. E. Miles. LC1046.W5M5
3. Industrial education. The impending step in American educational policy: its significance to the boy, the parent, the community, the state, the nation, by H. E. Miles. LC1081.M5
4. The education of the girl. The necessity of fitting her education to her life, by L. D. Harvey. LC1481.H2
5. Industrial and continuation schools. Their foundation, organization, and adjustment to the life of the community, by Louis E. Reber. LC5215.R4
6. Public school manual arts. An agency for vocational education, by F. D. Crawshaw. LC1043.C82
7. Annual report of the public continuation schools of Wisconsin, 1912-13.
- 1706 **Woolley, Mrs. Helen T.** Facts about the working children of Cincinnati, and their bearing upon educational problems. *Elementary school teacher*, Oct., Nov. 1913, v. 14: 59-72; 132-139. L11.E6,v.14
- 1707 **Wright, Carroll Davidson.** The apprenticeship system in its relation to industrial education. Washington, Govt. print. off., 1908. 116 p. 23^{cm}. (U. S. Bureau of education. Bulletin, 1908: no. 6) L111.A6 1908,no.6
"List of references relating to the education of apprentices": p. 87-92.
- 1708 **Zentralstelle für Volkswohlfahrt. 5. Konferenz, Elberfeld, 1911.** Das Lehrlingswesen und die Berufserziehung des gewerblichen Nachwuchses; Vorbericht und Verhandlungen am 19. und 20. Juni 1911 in Elberfeld. Berlin, C. Heymann, 1912. xii, 506 p. 22¹cm. (Schriften der Zentralstelle für Volkswohlfahrt; hft. 7 der neuen Folge der Schriften der Zentralstelle für Arbeiterwohlfahrts-einrichtungen) HD7707.Z5,v.7
"Literaturverzeichnis": p. [ix]-xii.

JUVENILE OCCUPATIONS AND EMPLOYMENT BUREAUS.

- 1709 **Apprenticeship and skilled employment association, London.** Trades for London boys and how to enter them, comp. by the Apprenticeship and skilled employment association . . . London, New York [etc.] Longmans, Green, and co., 1908. vi, 170 p. 21½^{cm}. HF5381.A8
- 1710 ———— **Trades for London girls and how to enter them; a companion book to Trades for London boys . . .** London, New York [etc.] Longmans, Green, and co., 1909. xxi, 145 p. 21½^{cm}. HD6058.A7
- 1711 **Ayres, Leonard Porter.** Constant and variable occupations and their bearing on problems of vocational education . . . New York city, Division of education, Russell Sage foundation [1914] 11 p. 23^{cm}. ([Russell Sage foundation, New York. Pamphlet] E 136) LC1045.A9
- 1712 **Birmingham, Eng. Education committee.** Report of the special subcommittee on the institution of a juvenile employment bureau and care committee in Birmingham. Adopted by the Education committee, Dec. 16, 1910. Birmingham, Percival Jones, 1910. 36 p.
- 1713 ———— **Report on the Birmingham system of care committees and juvenile employment bureaux.** Birmingham [1912?] 35 p. 24½^{cm}.
- 1714 ———— **Central care committee.** Explanatory statement of the scheme for school care committees and juvenile employment exchanges. June, 1912. 10 p. 21½^{cm}.
- 1715 ———— **1st-2d annual report . . . 1912-1913.** Birmingham [1912?-1913?] 2 v. 24½^{cm}.
- 1716 ———— **Information concerning certain trades for women and girls.** [n. p., n. d.] 13 p. 21½^{cm}.
- 1717 **Bradford, Eng. Education committee.** Occupations open to young people in Bradford. Building trades; clerks, butchers, grocers, photographers, tailors. [n. p., n. d.] 26 p. 23^{cm}.
- 1718 ———— **Engineering trade section.** [n. p., n. d.] 23 p. 24½^{cm}.
- *1719 ———— **Printing trade, shop assistants, sheet metal workers, tramway employees, boot and shoe trade, saddlers, leather goods manufacturers [etc.]** [n. p., n. d.] 38 p. 24½^{cm}.
- 1720 ———— **Professions. Accountants, architects, auctioneers, bankers, chemists, dentists, solicitors, teachers, civil service.** [n. p., n. d.] 29 p. 24^{cm}.
- 1721 ———— **Women's section. Nurses, dressmakers, milliners, machinists, laundresses, waitresses, domestic servants.** [n. p., n. d.] 23 p. 23^{cm}.
- 1722 ———— **Woollen and worsted trade section.** [n. p., n. d.] 16 p. 24^{cm}.
- 1723 ———— **Juvenile employment special sub-committee.** Report of work for the period ended 31st Dec. 1913. [n. p., 1914?] 24 p. 23^{cm}.
- 1724 **Campbell, M. Edith.** The vocation and employment bureau of Cincinnati. National child labor committee, New York, 1910. Pamphlet no. 132, p. 17-20. HD6250.U3N2,no.132
- 1725 **Cardiff. Education committee. Juvenile employment and central care committee.** 1st annual report of the Juvenile employment committee. 1912-13. Cardiff [1913?] 28 p. 32½^{cm}.
- 1726 **Chamberlain, Norman.** Labour exchanges and boy labour. Economic review, Oct. 15, 1909, v. 19: 400-409. HB1.E4,v.19

- 1727 **Chicago school of civics and philanthropy. Dept. of social investigation.** Finding employment for children who leave the grade schools to go to work. [Chicago, Manz engraving company, The Hollister press, 1911] 56 p. 26^{cm}. HF5381.C6
 CONTENTS.—The school and the working-child: a plea for employment supervision in city schools [by] S. P. Breckinridge and E. Abbott.—Preliminary report on opportunities of employment in Chicago open to girls under sixteen [by] A. S. Davis.—Public care of working-children in England and Germany: some notes on juvenile labour exchanges, by E. Abbott.—Trade and technical classes for girls in Chicago.—Selected bibliography relating to employment supervision (p. 53-56)
- 1728 **Cincinnati. Chamber of commerce and merchants' exchange. Survey committee.** Printing trades. Cincinnati, O., Cincinnati chamber of commerce [1915] 141 p. chart. 22½^{cm}. Z122.C56
 At head of title: Industrial survey of Cincinnati Vocational section.
 Bibliography: p. 140-141.
- 1729 **Davis, Anne.** Occupations and industries open to children between fourteen and sixteen years of age. Chicago, Board of education, 1914. 19 p. 14½^{cm}.
- 1730 **Dearle, N. B.** Report of the special subcommittee of the City of Birmingham education committee on the institution of a juvenile employment bureau and care committees in Birmingham (adopted by the Education committee, December 16, 1910) *Economic journal*, June, 1911, v. 21: 301-305. HB1.E3,v.21
- 1731 **Dodge, Harriet Hazen.** Survey of occupations open to the girl of fourteen to sixteen years. Boston, Mass., Girls trade education league, 1912. 39 p. 23^{cm}. HD6058.D7
- 1732 **Edlmann, Edith.** Juvenile labour exchanges and apprenticeship bureaux in Germany. *Contemporary review*, Aug. 1913, v. 104: 230-239. AP4.C7,v.104
- 1733 **Gordon, Mrs. Maria Matilda.** A handbook of employments specially prepared for the use of boys and girls on entering the trades, industries, and professions. Aberdeen, The Rosemount press, 1908. 3 p. l., 444 p. 21½^{cm}. HF5381.G8
- 1734 ——— Juvenile employment bureaux. *Contemporary review*, June, 1911, v. 99: 723-732. AP4.C7,v.99
- 1735 **Gt. Brit. Board of trade.** Handbooks on London trades . . . Prepared on the behalf of the Board of trade for the use of advisory committees for juvenile employment in Greater London. London, 1914-15. 13 pam. 24½^{cm}. HF5381.G83
 CONTENTS.—Clothing trades. pt. 1. Girls; pt. 2. Boys. 1915.
 Commercial occupations. 1914.
 Engineering. 1914.
 Food, drink, and tobacco trades. 1915.
 Gas and electricity supply trades. 1915.
 The Glass trades. 1914.
 Laundry work, dyeing and cleaning. 1915.
 Leather, fur, brush making, and feather trade. 1915.
 Precious metal, instrument making and sport trades. 1914.
 Printing, bookbinding and stationery trades. Pt. 1. Boys. Pt. 2. Girls. 1915.
 Vehicle making and miscellaneous metal trades. 1915.
- 1736 ——— Labour exchanges act, 1909. Special rules with regard to registration of juvenile applicants in England and Wales made in pursuance of regulation no. ix of the general regulations for labour exchanges managed by the Board of trade. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, ltd. [1910] 3 p. incl. form. 33^{cm}. HD5915.A5 1910a
- 1737 **Greenwood, Arthur.** Juvenile labour exchanges and after-care. London, P. S. King & son, 1911. xi, 112 p. 21½^{cm}. HD6250.G7G7
 Bibliography: p. [101]-112.

- 1738 **Greenwood, Arthur.** The organisation of the juvenile labour market. Progress, Apr. 1911, v. 6: 97-105. HN381.P9,v.6
- 1739 **Hartford vocational guidance committee.** Report of the Vocational guidance committee, Hartford, Conn., January, 1914. [Hartford, 1914] 22 p. 20^{cm}. HF5381.H2
- 1740 **Hiatt, James Smith.** The child, the school, and the job. [Philadelphia, 1912] 13 p. 25^{cm}. (Public education association. Study no. 39)
Reprinted from the "City club bulletin," Dec. 27, 1912. J81261.C47,v.6
- 1741 **Iowa state teachers' association. Committee on vocational education and vocational guidance.** Vocational education and vocational guidance; a survey and preliminary report by a committee appointed by the Iowa teachers' association. Issued by the Department of public instruction. [Des Moines?] 1914. 96 p. 23^{cm}. [Iowa. Dept. of public instruction. Bulletin no. 13] LB1046.I7
- 1742 **Jevons, H. Winefrid.** Apprenticeship and skilled employment committees; with an account of the work of the Cambridge boys' employment registry by Eglantyne Jebb. (In Sadler, M. E. ed. Continuation schools in England & elsewhere. 2d ed. Manchester, 1908, p. 454-471) LC5215.S25
- 1743 **Juvenile labor bureaus and vocational guidance in Great Britain.** U. S. Bureau of education. Bulletin, 1912, v. 11: 13-17. L111.A6,v.11
- 1744 **Keeling, Frederic.** The labour exchange in relation to boy and girl labour. London, P. S. King, 1910. 76 p.
Bibliography: p. 73-76.
- 1745 **Kelley, Mary B. G.** Juvenile workers' bureau. (In Philadelphia. Municipal court. 2d annual report, 1915, p. 145-151)
- 1746 **Knowles, G. W.** Junior labour exchanges (a plea for closer cooperation between labour exchanges and education authorities) London, Sherratt & Hughes, 1910. 32 p. 22^{cm}.
- 1747 **Laselle, Mary Augusta, and Katherine E. Wiley.** Vocations for girls. Boston, New York [etc]. Houghton Mifflin company [1913] x, 139 [1] p. 18^{cm}. HD6058.L3
Bibliography: p. [130]-132.
- 1748 **Mangold, George Benjamin.** Industrial opportunities of children in St. Louis. [St. Louis? n. d.] p. 66-83. 28^{cm}.
"Reprinted from Washington university studies, v. 1, pt. 2, no. 1, Oct. 1913."
- 1749 **Minneapolis vocational survey committee.** A vocational survey of Minneapolis, pub. by the Minneapolis teachers' club, 1913. [Minneapolis, 1913] 90 p. diags. 23^{cm}.
- 1750 **Parsons, James.** Skilled employment committees. Charity organisation review, July, 1907, n. s. v. 22: 19-35. HV1.C6,n.s.v.22
- 1751 **Peck, J. W.** Juvenile employment: the Edinburgh method of co-operation between the education authorities and the labour exchanges. (In National conference on the prevention of destitution. 1st, London, 1911. Report of the proceedings. London, 1911. 254^{cm}. p. 219-237) HV244.N3 1911
- 1752 **Richmond, Va. Vocational education survey.** Vocational education survey of Richmond, Va. August, 1915. Washington, Govt. print. off., 1916. 333 p. fold. tables. 23^{cm} (Bulletin of the United States Bureau of labor statistics, whole no. 162. Miscellaneous series, no. 7)
HD8051.A62,no.162
- 1753 **Russell, Charles Edward B., and Lilian M. Rigby.** Working lads' clubs. London, Macmillan and co., limited, 1908. xii p., 1 l., 445 p. illus., 23 pl. (incl. front., plan) tables (1 fold.) 19^{cm}. HV878.R8
Labour bureaux, p. 286-304.

- 1754 **Talbert, Ernest Lynn.** Opportunities in school and industry for children of the stockyards district. Chicago [University of Chicago press] 1912. vi, 64 p. 24 $\frac{1}{2}$ cm. (A study of Chicago's stockyards community . . . an investigation carried on under the direction of the Board of the University of Chicago settlement. I) HN80.C5B6
- 1755 **Ueland, E.** Juvenile employment exchanges. American labor legislation review, June, 1915, v. 5: 203-237. HD7833.A55,v.5
- 1756 **U. S. Bureau of labor.** Vocational guidance. Washington, Govt. print. off., 1911. iii, 411-497 p. 23 $\frac{1}{2}$ cm. HF5381.U6
Part of 26th Annual report of the commissioner of labor, 1910.
- 1757 **Vocation bureau, Boston.** Vocational guidance and the work of the Vocation bureau of Boston. Boston, 1915. 15 p. 23cm.
- 1758 ———— Vocations for Boston boys, issued by the Vocation bureau of Boston. [Bulletin no. 1-7] [Boston? 1911-] 7 v. 20 $\frac{1}{2}$ cm. HF5381.V5
CONTENTS.—No. 1, The machinist; no. 2, Banking; no. 3, The baker; no. 4, Confectionery manufacture; no. 5, The architect; no. 6, The landscape architect; no. 7, The grocer.
- 1759 ———— Vocations for boys and young men. Boston, 1911-1913. 3 v. CONTENTS.—Banking. 1911. The department store and its opportunities. 1912. Allen, F.J. The law as a vocation. 1913.
- 1760 **Vocation office for girls, Boston.** Vocations for Boston girls, issued by the Vocation office for girls . . . [Bulletin no. 1-14] Boston, Mass., The Girls trade educational league, 1911-1912. 14 pam. 20 $\frac{1}{2}$ cm. HD6058.V7
Contains "References."
CONTENTS.—1, Telephone operating; 2, Bookbinding; 3, Stenography and typewriting; 4, Nursery maid; 5, Dressing; 6, Millinery; 7, Straw hat making; 8, Manicuring and hairdressing; 9, Nursing; 10, Salesmanship; 11, Clothing machine operating; 12, Paper box making; 13, Confectionery manufacture; 14, Knit goods manufacture.
- 1761 **Weaver, Eli Witwer, and J. Frank Byler.** Profitable vocations for boys. New York and Chicago, The A. S. Barnes co., 1915. 282 p. 19cm. (The vocational series) HF5381.W3
Contains bibliographies.
- 1762 ——— ed. Profitable vocations for girls, prepared by a committee of teachers under the direction of E. W. Weaver. New York and Chicago, The A. S. Barnes co., 1915. 212 p. 19cm. (The vocational series) HD6058.W27
A new edition of "Vocations for girls," pub. 1913. Contains bibliographies.

HEALTH OF WORKING CHILD.

- 1763 **Adler, Felix.** Conservation of the human assets of the nation. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 1-6. H1.A4,v.35
National child labor committee. Pamphlet no. 125. 7 p. HD6250.U3N2,no.125
- 1764 **Alden, Percy.** The child and the state. Chautauquan, Oct. 1910, v. 60: 183-202. AP2.C48,v.60
- 1765 **Bruère, Robert W.** Physiological age and child-labor. (In National education association, Journal of proceedings and addresses . . . 1908. Winona, Minn. 1908. 23 $\frac{1}{2}$ cm. p. 924-932) L13.N4 1908
- 1766 **Brown, H. Maughan.** Schoolboys as wage earners. Child, London, Sept. 1912, v. 2: 1026-1030. HQ750.A2C4,v.2

- 1767 Cheney, Howell.** Practical restrictions on child labor in textile industries; higher educational and physical qualifications. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 86-99.
H1.A4,v.33
National child labor committee. Pamphlet no. 96. 14 p.
HD6250.U3N2,no.96
- 1768 Churchill, F. S.** The effect of irregular hours upon the child's health. (*In* Chicago. Child welfare exhibit, 1911. The child in the city. Chicago, 1912. 22^{cm}. p. 310-312)
HV741.C4
- 1769 Clopper, Edward N.** Effects of street trading on the health of school children. New York, National child labor committee, [1913] 8 p. 23^{cm}. (Pamphlet no. 218)
HD6250.U3N2,no.218
- 1770 Corcoran, Julia.** Actual present physical state of working children in Connecticut. (*In* Child labor conference. Hartford, Conn., 1908. Report of the proceedings . . . [Hartford] 1909. 22^{cm}. p. 4-5)
HD6250.U4C8 1908
- 1771 Crampton, Charles Ward.** The significance of physiological age in education. [Washington, Govt. print. off., 1913] 13 p. 23^{cm}. Reprinted from the Transactions of the fifteenth International congress on hygiene and demography, [v. 3: 224-235]
RA122.N585 1912,v.3
- 1772 De Leon, Edwin W.** Accidents to working children. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 131-143.
H1.A4,v.33
- 1773 Dwight, Helen C.** Dangerous machines in the metal trades. Child labor bulletin, Nov. 1914, v. 3, no. 3: 66-75.
HD6250.U3N4,v.3,no.3
- 1774 Frankel, Lee K., and Louis I. Dublin.** Heights and weights of New York city children 14 to 16 years of age; a study of measurements of boys and girls granted employment certificates. New York, Metropolitan life insurance co., 1916. 53 p.
- 1775 Freiberg, Albert, H.** Some effects of improper posture in factory labor. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 104-110.
H1.A4,v.33
National child labor committee. Pamphlet no. 102. 7 p.
HD6250.U3N2,no.102
- 1776 ———** Some of the ultimate physical effects of premature toil. American academy of political and social science. Annals, Jan. 1907, v. 29: 19-25.
H1.A4, v. 29
National child labor committee, Pamphlet no. 43. 7 p.
HD6250.U3N2,no.43
- 1777 Goldmark, Josephine Clara.** Fatigue and efficiency; a study in industry. Containing also the substance of four briefs in defense of women's labor laws by Louis D. Brandeis and Josephine Goldmark. New York, Charities publication committee, 1912. xvii, 302 p., 1 l., 591 p. incl. illus., charts. 24^{cm}. (Russell Sage foundation [publication])
HD5106.G7
- 1778 Gordon, Jean M.** Developing normal men and women. Child labor bulletin, May, 1913, v. 2, no. 1: 121-123.
HD6250.U3N4,v.2
- 1779 Gt. Brit. Board of education.** Annual report of the chief medical officer of the Board of education. 1911-1914. London, Printed for H. M. Stationery off., by Eyre and Spottiswoode, ltd., 1912-1915. 4 v. 25^{cm}. [Parliament. Papers by command]
1911: Medical inspection and juvenile employment: p. 245-268.
1912: Medical inspection and juvenile employment: p. 309-327.
1913: Examination of leavers: II. Relation to juvenile employment: p. 271-284.
1914: Juvenile employment and the war; examination of leavers: p. 223-239.

- 1780 **Gt. Brit. Inter-departmental committee on partial exemption from school attendance.** Report. Presented to both houses of Parliament by command of His Majesty. London, Printed for H. M. Stationery off., by J. Truscott & son, ltd., 1909. 2 v. in 1. tables. 33^{cm}. ([Parliament. Papers by command] Cd. 4791, 4887) HD6250.G7A4 1909
 Educational results, v. 1, p. 7-8.
 Effect on health of the children, v. 1, p. 6-7.
 Physical effects of mill life: Extract from report by Dr. Arthur Greenwood. Appendix no. 16, p. 262-268.
- 1781 **Greenwood, Arthur.** The medical supervision of juvenile workers. (*In* National conference on the prevention of destitution. 2d, London, 1912. Report of the proceedings of the unemployment and industrial section. London, 1912. 24^{1/2}^{cm}. p. 98-106.) HD6384.N3
- 1782 **Hall, George A.** Physical examination for working papers in New York. Survey, Dec. 13, 1913, v. 31: 297. HV1.C4,v.31
- 1783 **Hanson, William C.** Exclusion of children from dangerous trades. American academy of political and social science. Annals, Supplement, July, 1911, v. 38: 90-94. H1.A4,v.38
- 1784 ——— The health of young persons in Massachusetts factories. American academy of political and social science, Annals, Supplement, Mar. 1910, v. 35: 111-113. H1.A4,v.35
 National child labor committee. Pamphlet no. 131. 3 p. HD6250.U3N2,no.131
- 1785 **Harmon, William E.** Handicaps in later years from child labor. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 122-130. H1.A4,v.33
 National child labor committee. Pamphlet no. 104. 8 p. HD6250.U3N2,no.104
- 1786 **Henderson, Charles E.** Social cost of accident, ignorance, and exhaustion. American academy of political and social science, Annals, Supplement, July, 1908, v. 32: 11-18. H1.A4,v.32
 National child labor committee. Pamphlet no. 72. 8 p. HD6250.U3N2,no.72
- 1787 **Hoffman, Frederick L.** The social and medical aspects of child labor. (*In* National conference of charities and correction. Proceedings, 1903. [Columbus, O.] 1903. 23^{1/2}^{cm}. p. 138-157) HV88.A3 1903
- 1788 **Hutchinson, Woods.** Overworked children on the farm and in the school. American academy of political and social science, Annals, Supplement, Mar. 1909, v. 33: 116-121. H1.A4,v.33
 National child labor committee. Pamphlet no. 105. 6 p. HD6250.U3N2,no.105
- 1789 **Johnston, John.** Wastage of child life, as exemplified by conditions in Lancashire. London, A. C. Fifield, 1909. 95 p. 19^{cm}. (The Fabian socialist series, no. 7) HQ769.J7
 "References": p. 94-95.
- 1790 **Jones, H. H.** The work of England's certifying surgeons. Child labor bulletin, Feb. 1914, v. 2, no. 4: 76-79. HD6250.U3N4,v.2
- 1791 **Kelley, Mrs. Florence.** Insanitary conditions amongst home workers. (*In* International congress of women, London, 1899. London, 1900. 20^{1/2}^{cm}. v. 6, p. 21-25) HQ1106 1899,v.6

- 1792 **Kober, George M.** The physical and physiological effects of child labor. American academy of political and social science, *Annals*, Mar. 1906, v. 27: 285-288. H1.A4,v.27
National child labor committee. Pamphlet no. 20, p. 27-30; Pamphlet no. 25, 4 p. HD6250.U3N2,no.20;no.20a;no.25
- 1793 **Loriga, Giovanni.** Lavoro dei fanciulli e crescita del corpo, per il Prof. Giovanni Loriga. Roma, Officina poligrafica italiana, 1910. 107 p. 31^{cm}. (Italy. Ufficio del lavoro. Pubblicazioni, serie B, n. 26)
"Bibliografia": p. 73-74.
- 1794 **Lovejoy, Owen B.** Child labor and health. National child labor committee, New York. 1913. Pamphlet no. 189. 13 p. Reprinted from Child labor bulletin, Feb. 1913, v. 1, no. 4, p. 57-68. HD6250.U3N2,no.189
- 1795 ——— A six years' battle for the working child. American review of reviews, Nov. 1910, v. 42: 593-596. AP2.R4,v.42
- 1796 ——— Some unsettled questions about child labor. American academy of political and social science, *Annals*, Supplement, Mar. 1909, v. 33: 49-62. H1.A4,v.33
National child labor committee. Pamphlet no. 108. 14 p. HD6250.U3N2,no.108
- 1797 **Luther, Seth.** An address to the working-men of New-England, on the state of education, and on the condition of the producing classes in Europe and America. With particular reference to the effect of manufacturing (as now conducted) on the health and happiness of the poor, and on the safety of our republic. Delivered in Boston, Charlestown, Mass., Portland, Saco, Me., and Dover, N. H. By Seth Luther. Boston, The author, 1832. 39 p. 22¹/₂^{cm}. Miscellaneous pamphlets, v. 1161, no. 2. AC901.M5,v.1161
- 1798 **McKelway, A. J.** Child labor and its consequences. By A. J. McKelway. [New York? 1908?] 16 p. 23¹/₂^{cm}. (National child labor committee. Pamphlet no. 68) HD6250.U3N2,no.68
"Reprinted from the Sewanee review for April, 1908".
- 1799 **McMillan, Margaret.** The effects of monotonous toil in the years preceding adolescence. (In International congress of hygiene and demography. Transactions, 15th, 1912, v. 3: 985-1000) RA122.N585 1912,v.3
- 1800 **Malcolm, A. G.** The influence of factory life on the health of the operative, as founded upon the medical statistics of this class at Belfast. Royal statistical society, *Journal*, June, 1856, v. 19: 170-181. HA1.R8,v.19
- 1801 **Maryland. Bureau of industrial statistics.** Report of medical examiners, 1913, 1914, 1915. (In its Annual report, 1913, p. 40-47; 1914, p. 100-138; 1915, p. 84-100, 174-179) HC107.M3A2 1913-1915
- 1802 **Medical testimony of the evils of child labor.** Charities, April 14, 1906, v. 16: 92-93. HV1.C4,v.16
- 1803 **Mitchell, John.** Proper minimum age for working children. (In Child labor conference. Hartford, Conn., 1908. Report of the proceedings . . . [Hartford] 1909. 22^{cm}. p. 26-32) HD6250.U4C8 1908
- 1804 **Montgomery, Louise.** The American girl in the stockyards district. Chicago, Ill., The University of Chicago press [1913] vi, 70 p. illus. (plan) plates, diagrs. 24^{cm}. (A study of Chicago's stockyards community . . . An investigation carried on under the direction of the Board of the University of Chicago settlement and the Chicago alumnae club of the University of Chicago. II) HN80.C5B6
Health, p. 28-32, 55-57.

- 1805 **Mosso, Angelo.** *Fatigue.* Tr. by Margaret Drummond and W. B. Drummond. New York, G. P. Putnam's sons; London, S. Sonnenschein & co., ltd., 1904. xiv, 334 p. illus. 19^{cm}. (The science series) QP421.M91
- 1806 **Nation (London)** [Editorial] *The waste of child labor.* *Nation (London)*, Feb. 28, 1914, v. 14: 891-892. AP4.N15,v.14
- 1807 **National child labor committee, New York.** *Night-work and day-sleep; what it means to a man, woman, or child to invert nature's order for work and sleep.* [New York] 1911. 15 p. 23^{cm}. (Pamphlet no. 149)
HD6250.U3N2,no.149
- 1808 **Nearing, Scott.** *Can the state afford to pay the cost of overworking its children?* *Charities and the Commons*, Feb. 3, 1906, v. 15: 602-606.
HV1.C4.v.15
- 1809 **Noble, D.** *On the influence of the factory system in the development of pulmonary consumption.* *Royal statistical society, Journal*, Oct. 1842, v. 5: 274-280. HA1.R8,v.5
- 1810 **Oates, W. H.** *Child labor and health.* *Child labor bulletin*, v. 2, no. 1: 117-120. HD6250.U3N4,v.2
- 1811 **Ohio. State board of health.** *A survey of industrial health-hazards and occupational diseases in Ohio*, by E. R. Hayhurst. Columbus, The F. J. Heer printing co., 1915. 2 p. l., iii-xviii, 438 p. illus. 22^{cm}. RA787.O4
HD7263.O4
- 1812 **Oliver, Sir Thomas, ed.** *Dangerous trades: the historical, social, and legal aspects of industrial occupations as affecting health, by a number of experts.* London, J. Murray, 1902. xxiii, 891, [1] p. incl. illus., tables, diagrs. plates. 24^{cm}. HD7262.O5
- 1813 ——— *Diseases of occupation from the legislative, social, and medical points of view.* . . . London, Methuen & co. [1908] xix, 427, [1] p. 2 pl. 22½^{cm}. (The new library of medicine; ed. by C. W. Saleeby) RA787.O6
- 1814 **Pearson, Robert H.** *Occupational diseases.* New York, N. Y., The Weekly underwriter [1915] 32 p. illus. 18½^{cm}. RA787.P4
- 1815 **Roberts, Charles.** *The physical requirements of factory children.* *Royal statistical society, Journal*, Dec. 1876, v. 39: 681-733. HA1.R8,v.39
- 1816 **Ross, George F.** *Extending medical inspection from schools to mills.* *Child labor bulletin*, v. 1, no. 1, June 1912, p. 128-134. HD6250.U3N4,v.1
- 1817 **Rotch, Thomas Morgan.** *Child labor and work of children should be adapted to the individual child.* (*In International congress of hygiene and demography.* *Transactions*, 15th, 1912, v. 3: 975-984) RA122.N585 1912,v.3
- 1818 **Royal society of arts, London.** *Shaw lectures on industrial hygiene.* Delivered before the Royal society of arts in November and December, 1907; and February and March, 1908. London, Printed by W. Trousce, 1908. 63 p. incl. illus., tables, diagrs. 25^{cm}. RA787.R88
Also publ. in *Royal society of arts, Journal*, June, 12, 1906, v. 56: 738-747. T1.S64,v.56
- 1819 **Smith, Oliver C.** *The critical character of the age period from fourteen to sixteen.* (*In Child labor conference.* Hartford, Conn., 1908. *Report of the proceedings* . . . [Hartford] 1909. 22^{cm}. p. 8-13)
HD6250.U4C8 1908
- 1820 **Stetson, George R.** *Industrial classes as factors in racial development.* *Arena*, Feb. 1909, v. 41: 177-189. AP2.A6,v.41
- 1821 **Taylor, Florence.** *Mortality among cotton operatives.* *Child labor bulletin*, Nov. 1914, v. 3, no. 3: 62-65. HD6250.U3N4,v.3,no.3

- 1822 **Teleky, Ludwig.** Altersprobleme gewerblicher Hygiene. (*In International congress of hygiene and demography. Transactions, 15th, 1912, v. 3: 957-974*) RA122.N585 1912,v.3
- 1823 ——— Altersprobleme gewerblicher Hygiene. [Wien, 1913?] 17 p. "Separatabdruck aus heft 2, I. jahrg. (1913) der Zeitschrift für öffentliche gesundheitspflege".
- 1824 **Thackrah, Charles Turner.** The effects of arts, trades, and professions, and of civic states and habits of living, on health and longevity: with suggestions for the removal of many of the agents which produce disease, and shorten the duration of life. 2d ed., greatly enl. London, Longman, Rees, Orme, Brown, Green, & Longman; [etc., etc.] 1832. 1 p. l., [vii]-viii p., 1 l., 238 p. 22 $\frac{1}{2}$ cm. RA787.T37
Children: p. 35-37; 77-84; 148-149; 177-179.
- 1825 **Thompson, William Gilman.** The occupational diseases; their causation, symptoms, treatment, and prevention. New York and London, D. Appleton and company, 1914. xxvi, 724 p. illus., diags. 24 $\frac{1}{2}$ cm. RC964.T4
- 1826 **Travers, J. C.** Some physical effects of industry upon the working children of Maryland. Maryland medical journal, Mar. 1914, v. 57: 59-64. R11.M32,v.57
- 1827 **U. S. Bureau of labor.** Laws relating to factory inspection and the health and safety of employees. (*In its Bulletin, Nov. 1907, no. 73: 817-986.*) HD8051.A5,no.73
- 1828 **Woolley, Mrs. Helen (Thompson), and Charlotte Rust Fischer.** Mental and physical measurements of working children. Princeton, N. J., and Lancaster, Pa., Psychological review company [1914] 2 p. l., 247 p. incl. tables, diags. 25cm. (Psychological review publications. The psychological monographs . . . vol. xviii, no. 1; whole no. 77. Dec. 1914) BF1.P8,vol.18,no.1

AUTHOR INDEX.

[The numbers refer to items, not to pages.]

Abbott, Edith.....	50, 51, 1727	Baker, S. Josephine.....	556
Abelsdorff, Walter.....	52, 734, 817	Baldwin, B. J.....	79, 326
Abercrombie, Anna S.....	297	Ballantyne, A.....	1136
Aberdeen, I. M. Gordon, <i>countess of</i>	747	Barker, Henry A.....	1324
Ackroyd, Thomas R.....	1360	Barnard, Henry.....	1503
Adams, John C.....	102	Barnard, J. Lynn.....	463
Adams, M. Bridges.....	1049	Barnard, Kate.....	80, 81
Adams, Myron E.....	320, 1361, 1362	Barrett, J. F.....	330a
Adams, Thomas S.....	54, 212	Barrows, Alice P.....	327, 1652, 1666
Adamson, William C.....	713	Bartlett, Charles L.....	673
Addams, Jane.....	55-63a, 320, 321, 322, 324, 326, 329, 356, 457, 862, 1322, 1323, 1363, 1494-1496, 1498	Bates, Blanche.....	1325-1327
Adler, Eleanor H.....	334, 341, 1133, 1234	Batten, Samuel Z.....	383
Adler, Felix.....	64-67, 226, 320, 322, 323, 325, 326, 327, 329, 330, 1652, 1763	Baudoin, Lionel.....	963
Adler, Georg.....	818	Beauregard, Paul.....	800
Adler, Nettie.....	63, 951, 969, 1364-1366	Beck, James D.....	330
Agahd, Konrad.....	761, 819-826, 1050	Beckwith, Holmes.....	1504
Alabama. Department for inspection of jails, etc.....	69-71, 458, 459	Beeks, Gertrude.....	1237
Alabama. Governor, 1915.....	72	Belgium. Corps législatif.....	782
Alabama child labor committee.....	73	Laws, statutes, etc.....	783, 785
Al Priddy, <i>pseud.</i> See Brown, F. K.....		Ministère de l'intérieur.....	786
Albrecht, Otto.....	1051	Office du travail.....	787
Alden, Mrs. Margaret P.....	863, 864	Belgium (Territory under German occupa- tion, 1914-). Laws, statutes, etc.....	788
Alden, Percy.....	1135, 1764	Benedict, Leonard.....	1268
Alexander, Hooper.....	325	Berger, T. Ph.....	828
Allen, Alfred G.....	1105	Berry, Georges.....	808
Allen, Carrie W.....	1225	Bertoni, B.....	1022
Allen, F. J.....	1759	Best, Marie.....	396
American academy of political and social science.....	74, 1499	Best, Robert H.....	1505
American association for labor legislation.....	20, 460	Betts, Lillian W.....	1137, 1190
American federation of labor.....	1500, 1501	Beveridge, Albert J.....	322, 601-605, 664, 1361
American year book.....	461	Beveridge, William H.....	1506
Anderson, Adelaide M.....	960	Bierer, Willy.....	829, 1138
Anderson, Neal L.....	226, 330, 463	Birmingham, England. Education commit- tee.....	1712-1716, 1730
Andrews, John B.....	484	Bittman, Karl.....	845
Anton, Günther Kurt.....	827	Black, Clementina.....	867
Apprenticeship and skilled employment as- sociation, London.....	1709, 1710	Blackmon, Fred L.....	680
Arendt, Henriette, <i>sister</i>	736	Blankenburg, Rudolph.....	476
Argentine Republic.....	1035, 1086	Blascoer, Frances.....	82
Armstrong association of Philadelphia.....	75	Blenk, James H., <i>archbishop</i>	329, 1369
Arnstein, Leo.....	824	Bliss, H. L.....	730
Aronovici, Carol.....	76	Bloomfield, Meyer.....	1, 41, 830, 868, 1507-1512
Aronvls, B. C.....	1367	Blydenburgh, Benjamin B.....	1328
Ashby, Irene M. See Macfadyen, Irene M. A.....		Roeth, Charles.....	1139
Astor, Waldorf.....	1502	Borah, William E.....	326, 606
Atherton, Sarah H.....	77	Borland, William P.....	681
Austin, Richard W.....	713	Bosquet, Helen, Mrs. B.....	809, 870
Austria. Arbeitsstatistisches Amt.....	762	Boston. Post.....	689
Ayres, Leonard P.....	1711	Public schools.....	1371
Ayres, William A.....	679	Boswell, Helen V.....	83, 84
Baché, René.....	1077	Boswell, M. Louise.....	85, 328
Backus, August C.....	445	Benquet, Louis.....	796
Bacon, Augustus O.....	663	Bowen, Louise H.....	86, 1191, 1309
Bacon, Mary A.....	1236, 1236a	Bower, J. W. N.....	1404
Baggallay, F. W.....	865	Bradford, Eng. Education committee.....	1717-1723
Bailey, Mrs. E. L.....	78, 328	Bragg, Shirley.....	71
		Brants, V.....	964
		Bray, Reginald Arthur.....	13, 871, 872, 952, 1513, 1514
		Breckinridge, S. P.....	464, 465, 1727

- Bremer, Harry M. 329, 346, 466, 1063-1065
 Breton, Cloudeley 1515
 Brewer, Franklin N. 74, 1192
 Brinton, Jasper Y. 607, 650, 653
 British association for labour legislation . . 2, 873, 874
 Britt, James J. 713
 Britton, James A. 87, 324
 Brooke, Emma F. 737
 Brooklyn. Public library 42
 Brooks, John O. 88, 89, 321
 Brown, Edward F. 90,
 328, 342, 1078, 1079, 1084, 1085, 1372, 1373
 Brown, Emma E. 1374
 Brown, Frederic K. 1238
 Brown, H. Maughan 1516, 1766
 Brown, John George 1375
 Bruce, Andrew A. 608
 Bruère, Robert W. 1765
 Brumbaugh, Martin G. 378
 Brundage, Howard D. 18, 1654
 Brumhas, H. J. 797
 Brussels. Exp. du travail à domicile . . . 1140
 Bry, Georges Ernest 798
 Bryan, William J. 609
 Buckmaster, Stanley O. 875
 Bulgaria. Laws, statutes, etc. 1039
 Bullock, Edna D. 3, 91
 Bureau of municipal research, New York . . . 467
 Burke, Thomas 1376, 1517
 Burnham, Ernest 327, 1652
 Buser, Ralph C. 1518
 Butler, Elisabeth B. 92, 1193, 1377
 Byington, Margaret F. 1239
 Byler, J. Frank 1761
 Byrnes, James F. 713
 Cadwallader, Starr 323, 468
 California. Bureau of labor statistics . . . 83, 1080
 Industrial welfare commission 94
 Campagnac, E. T. 1378, 1519
 Campbell, Helen 440
 Campbell, John C. 326, 1240
 Campbell, M. Edith 95, 326, 327, 1653, 1794
 Campbell, Robert A. 470, 471
 Campbell, Willard A. 472
 Canada. Royal commission on industrial
 training 1520
 Cannon, Joseph G. 713
 Cape of Good Hope. Laws, statutes, etc. . . 1521
 Capen, Edward W. 1522
 Cardiff. Education committee 1726
 Carleton, Ernest E. 1066
 Carlton, Frank T. 97, 98, 1654
 Carrigan, Thomas C. 473
 Carter, William H. 682
 Cary, C. P. 1705
 Cary, William J. 683
 Catheron, Allison G. 99
 Chamberlain, Mary L. 1061, 1082
 Chamberlain, Norman 876, 1736
 Chandler, H. A. E. 474
 Chapman, Sydney J. 1241, 1523
 Chauvet, Émile 1014
 Chenery, William L. 1524
 Cheney, Howell 324, 1242, 1767
 Cherouny, Henry W. 1525
 Chessier, Elisabeth S. 1526
 Chevallier, A. A. 440
 Chicago. Child welfare exhibit, 1911 . . . 100, 101, 1389
 Chicago school of civics and philanthropy . . . 43,
 101, 1727
 Chicago. Vice commission 1579
 Child, Richard W. 629
 Child labor conference, Hartford, Conn. . . . 102
 Church, Denver S. 684
 Churchill, F. S. 161, 1768
 Chute, Charles L. 109, 116,
 226, 476, 479-481, 1069, 1114, 1115, 1210, 1261
 Cincinnati. Chamber of commerce, etc. . . . 1728
 City Club of Chicago 1389
 Clapham, J. H. 1547
 Clark, David 329, 674
 Clark, Davis W. 111
 Clark, S. H. 101, 1523
 Clark, Victor B. 878
 Clarke, Allen 879
 Claxton, P. P. 327, 1652
 Cleland, Ethel 112
 Cline, Cyrus 685
 Cloete, J. G. 964, 1499
 Clopper, Edward N. 4, 113-121, 323,
 324, 325, 326, 329, 330a, 341, 346, 493, 495, 721,
 722, 1060, 1211, 1383-1390, 1442, 1530-1532, 1769
 Cochran, Thomas 742
 Cohen, Barney 490
 Collet, Clara E. 880, 1141, 1244
 Colorado. Bureau of labor statistics 122
 Columbia typographical society, Wash. . . . 1593
 Columbia University. Teachers' college . . . 19
 Committee on wage-earning children,
 London 881, 892
 Commons, John R. 123, 124, 484
 Conant, Richard K. 326,
 327, 328, 329, 630, 653, 1245,
 1246, 1291, 1392, 1586, 1653
 Condy, George 883
 Conference of commissioners on uniform state
 laws 591-593
 Congrès inter. du patronage de la jeunesse
 ouvrière 738
 Connecticut. Board of education 487
 Bureau of labor statistics 102, 125, 126
 Commission to investigate conditions of
 wage-earning women and minors 127
 Consumers' league of Connecticut 102
 Conyngton, Mary 372, 321, 1098
 Cooley, Edwin G. 1537
 Cooley, Jane C. 440
 Coon, Charles L. 128, 326
 Cooper, John G. 686
 Cooreman, Gérard 796
 Corcoran, Julia 102, 1770
 Coulter, Ernest K. 129
 Courcelle, Louis 799, 800
 Covington, J. Harry 1105
 Cox, Irene 884
 Cox, William E. 687
 Craighead, Erwin 1538
 Cralesac, Abel 804
 Crampton, Charles W. 1771
 Crane, Mrs. Frederick 327, 1653
 Cranston, Mary R. 885, 1194, 1539
 Crawshaw, F. D. 1705
 Creel, George 220-223, 294
 Crosby, Ernest H. 1247

rosby, Fanny J.....	340	Emery, James A.....	613
rowley, R. H.....	1504	Engel, Sigmund.....	147
rumpecker, Edgar D.....	661, 665	Erickson, Halford.....	320, 405
unningham, William.....	886	Esche, Arthur.....	836
unnington, B.....	1540	Eschenbrenner, Josephine J.....	148,
ubney, Charles W.....	322, 1541		329, 330a, 342, 478, 1094
agan, Henri.....	801	Evans, Orrena L.....	496
alling, Frederick W.....	713	Fairchild, Fred R.....	497
aniele, Annie S.....	1142	Fabey, Charles P.....	1253
aniele, Harriet McD.....	130	Falkenbach, Joseph.....	837
ournay, Maxime.....	833	Farnam, Henry W.....	406, 614
avies, Edgar T.....	101, 131, 322, 324, 489, 490	Favill, Henry B.....	324, 326, 1335
avis, A. S.....	1727	Fehlinger, Hans.....	765
avis, Anne.....	1729	Feld, Wilhelm.....	838
avis, Philip.....	132, 1398, 1394	Ferraris, Carlo F.....	965
awley, Thomas R.....	133, 342, 1094, 1248	Field, Arthur S.....	149
awson, Lucile F.....	134	Findelsen, H.....	839
ooley, James Q.....	135	Fischer, Alfons.....	740
ean, Arthur D.....	20, 135a, 1542	Fischer, Charlotte R.....	1828
earle, Norman B.....	850, 1543, 1730	Fish, Frederick P.....	150
effenbaugh, W. S.....	1535	Fitzgerald, John J.....	661
o Groot, E. D.....	330	Fleisher, Alexander.....	1488
o Leacy, William H.....	136	Flesch, Karl.....	828
okes, Joseph M.....	1015	Flexner, Mary.....	1551
Delaware. General assembly. Senate.....	137	Folks, Homer.....	151, 322, 325, 499
o Leon, Edwin W.....	139, 324, 1772	Forbush, William B.....	152, 1398
Denman, Richard D.....	14, 899, 951, 1547	Fordney, Joseph W.....	673
Denmark. Laws, statutes, etc.....	1040-1045	Foster, Thomas.....	1254
Denson, Daisy.....	491	Fox, Charles E.....	383
Deutsch, Julius.....	1023	Fox, Hugh F.....	74, 133, 320, 500
Devine, Edward T.....	140, 323, 723	France. Assemblée nationale, 1871, Chambre	
Devon. County council.....	954	des députés.....	802
De Voss, Emilia V. Kanthack.....	834	Bureau des manufactures.....	803
Dewar, David.....	887	Comm. de l'enseignement professionnel.....	1552
Dewavrin, Maurice.....	492	Conseil général de l'agriculture.....	1553
Dewey, John.....	342, 1095	Conseil supérieur du travail.....	804, 1554
Dodd, Edward A.....	1108	Direction du travail.....	974, 1555-1557
Dodge, Harriet H.....	1731	Laws, statutes, etc.....	805, 1558, 1559
Doherty, J. B.....	141	Ministère des affaires étrangères.....	741
Dooley, L. W.....	1544	Min. du travail et de la prévoyance sociale.....	806, 807
Dorr, Rheta C.....	1143, 1195, 1249, 1260, 1545	Parlement, 1910. Chambre des députés.....	808
Doughton, Robert L.....	688	Francke, E.....	840
Dowdall, H. Chaloner.....	1395	Frankel, Lee K.....	1774
Downey, Ezekiel H.....	493	Fraser, Patrick F.....	1560
Drage, Geoffrey.....	888	Freeman, Arnold.....	5, 890
Drazer, Andrew S.....	142, 324, 1546	Freeman, William.....	501
Dron, Gustave.....	1558	Freiberg, Albert H.....	322, 324, 1775, 1776
Brown, Frank S.....	325, 724	Freundlich, Emmy.....	766
Drummond, Margaret.....	1805	Frey, John P.....	155, 327, 1652
Drummond, W. B.....	1805	Frost, Edward W.....	321, 325, 502
Dublin, Louis I.....	1774	Fulton, Charles W.....	667
Dubois, E.....	74, 789	Furman, Paul N.....	156
Dubois, Fred. T.....	662	Furth, Henriette.....	841
Ducpétiex, Édouard.....	739, 790, 1208	Gallivan, James A.....	689
Duckley, Henry.....	877	Gardner, Augustus P.....	666
Dunlop, Olive J.....	14, 899, 1547	Garnett, William H. S.....	891, 1399
Durham, Miss.....	850	Gaskell, P.....	892
Durland, Kellogg.....	143, 1212	Gay, E. F.....	527
Dutton, Samuel T.....	1548	Georgia. Laws, statutes, etc.....	675
Dwight, Helen C.....	334, 341, 1311, 1396, 1773	Gérard, Claire.....	1255
Eagleton, A. J.....	1403	Germany.....	1116, 1214
Eastman, Crystal.....	144	Komm. für Arbeiterstatistik.....	1562
Edmann, Edith.....	835, 1732	Laws, statutes, etc.....	842, 843
Edwards, Alba M.....	494	Statistisches Amt.....	742, 844
Edwards, Mrs. H. M.....	973	Gesellschaft für Soziale Reform.....	845, 1117, 1312
Edman, Benjamin W.....	145	Gibb, Spencer J.....	157, 967
Ellis, Leonora B.....	1251, 1252, 1549	Gibbons, James, Cardinal.....	297
Elson, W. E.....	327, 1632		

- Giddings, Franklin H. 1563
 Gideon, Henry J. 383
 Gillette, J. M. 327, 1061, 1653
 Gilman, Charlotte P. 216, 1564
 Giretti, Edoardo 906
 Görrer, Karl 846
 Golden, John 325, 1256
 Goldmark, Josephine C. 335, 478, 1401, 1777
 Goldmark, Pauline 366, 1084, 1144, 1196, 1402
 Goldstein, Fanny 1026
 Gompers, Samuel 321, 158-164, 1086
 Gordon, F. G. R. 1267
 Gordon, Jean M. 185,
 166, 323, 324, 326, 327, 328, 503, 1336, 1662, 1778
 Gordon, Mrs. Martha M. O. 894, 951, 1733, 1734
 Gorrell, Frank E. 1106
 Gottschalk, Alfred 1146
 Graffenried, Clara de 441
 Granger, Mrs. A. O. 167, 320
 Gray, Benjamin K. 1566
 Gray, Finly H. 690
 Gt. Brit. Board of education.... 895, 1566-1570, 1778
 Board of trade 896, 1735, 1736
 Sea fishing trade com 1571
 Census office 897
 Children's employment commission (1842)
 896, 1215, 1216
 (1892) 899, 1064
 (1897) 1062, 1064
 Education dept. 1572, 1573
 Factories inquiry commission 908
 Foreign office 901
 Home dept. 743, 902-910, 1197, 1216, 1403, 1404, 1574
 Interdepartmental com. 911, 1576, 1780
 Laws, statutes, etc. 912-914, 1217, 1337
 Parliament, House of Commons select
 committees 915-919, 1146, 1147
 Standing committee on bills 920
 Poor law comm. 1063
 Post office 921
 Royal comm. on labour 922, 1064
 Royal comm. on poor laws 923, 1406
 Greece. Laws, statutes, etc. 1046
 Green, William R. 691
 Greenwood, Arthur 924-927,
 952, 1065, 1576, 1737, 1738, 1780, 1781
 Griffin, Appleton Prentiss Clark 12, 17
 Grünzel, H. 1118
 Guggenheimer, Aimee 297
 Guild, Curtis 168, 325, 504, 1258
 Gunckel, John E. 1406
 Gunton, George 169
 Haas, Ella M. 329
 Hadley, A. T. 588
 Hale, Edward Everett 170
 Hale, Eugene 662
 Hall, Fred S. 325, 341, 505, 506, 725, 1119, 1577
 Hall, George A. 171, 326, 329,
 366, 507, 508, 1148, 1149, 1196, 1408, 1578, 1782
 Hall, Granville S. 1579
 Hall, Mary E. 44
 Hall, William C. 928
 Halsey, O. S. 929
 Hampke, Thilo 1580
 Hand, W. H. 327, 1535, 1581, 1592, 1632
 Hanks, Ethel F. 576
 Hanson, William C. 325, 326, 1783, 1784
 Hansus, Paul H. 1383
 Hanway, Jonas 930
 Hard, William 1490
 Hardy, Rufus 713
 Harmon, William E. 324, 1785
 Harms, Bernard 815
 Harriman, Mrs. J. Borden 325, 1259
 Harris, Henry J. 321, 509
 Hartford vocational guidance com 1730
 Harvey, E. C. 931
 Harvey, George 172
 Harvey, Lorenzo D. 1584, 1786
 Harwood, W. 932
 Hasbach, Wilhelm 1086
 Hauck, Karl 767
 Haworth, Paul L. 173
 Hayes, Denis A. 1120
 Hayhurst, E. R. 1611
 Haynes, Frederick E. 516
 Heaton, J. Henniker 1411
 Hedges, Anna C. 1585
 Hegedorn, Joseph H. 363
 Heller, Wolfgang 778
 Henderson, Charles 72
 Henderson, Charles H. 174
 Henderson, Charles R. 175, 176, 322, 324, 1786
 Henderson, Ernest N. 1664
 Henry, A. S. 1393
 Herbst, Rudolf 768
 Herkner, Anna 297, 329, 330
 Hiatt, James S. 1746
 Hicks, Frederick C. 662
 Hiller, Friedrich 823
 Hine, Lewis W. 177, 178
 190, 269, 326, 328, 329, 330, 334, 346, 1060, 1067,
 1086-1090, 1096, 1150, 1151, 1260-1262, 1272, 1586
 Hird, Frank 1132
 Hirsch, Emil G. 179, 320
 Hirst, F. W. 955
 Hochfelder, Julius 1587
 Hoffman, Frederick L. 933, 1787
 Hogg, Mrs. E. F. 1153, 1412, 1413, 1588
 Holland, E. O. 327, 1652
 Holland, Robert W. 744, 994
 Hollis, John P. 326, 327, 511, 1663
 Holloway, Charlotte M. 126
 Holmes, John H. 180, 325
 Hopkins, Mary Alden 1154, 1165, 1196, 1263
 Horton, Isabelle 182
 Hourwich, Isaac A. 183
 Howard, William S. 672, 713
 Hubbard, Elbert 183
 Huber, Mrs. C. J. 512
 Hughes, Edwin H., Mshp 330
 Hunter, Robert 184, 185, 498, 1472
 Hutchins, Miss B. Leigh 908, 965
 Hutchinson, Woods 324, 1098, 1589, 1786
 Thider, John 1414
 Illinois. Bureau of labor statistics 186
 Office of inspectors of factories and work-
 shops 187
 Independent labour party 996
 Indiana. Comm. on ind. and agri. educ. 1390
 Inglis, William 1415
 International association for labor legisla-
 tion 745, 746, 1121
 International congress of women, London, 1890 747

- International labor office..... 748, 749
 Iowa state teachers' association..... 1741
 Ireland. Street-trading children com..... 1416
 Iseman, Myre St. W..... 189
 Italy. Laws, statutes, etc..... 987, 988
 Ministero di agri., ind., e comm..... 989-990
 Ufficio del lavoro..... 991
 Jackson, Cyril..... 923, 987, 1496, 1599
 Jacobs, Charles Louis..... 45
 Jebb, Eglantyne..... 1742
 Jeuschik, A..... 799
 Jevons, H. Winifrid..... 938, 1506, 1594, 1742
 Johnson, Alexander..... 239, 864
 Johnston, A. S..... 698
 Johnston, John..... 1264, 1596, 1789
 Johnston, Lettie L..... 297, 1417, 1436
 Jones, Chester..... 908
 Jones, Herschel H..... 190, 329, 246, 1790
 Jones, Jerome..... 191, 328
 Jones, Jennie, pseud. See Cooley, Jane C.
 Kandel, I. L..... 192
 Kansas City, Mo. Public Library..... 21
 Kaup, J..... 845
 Keating, Edward..... 330a, 684, 713
 Keeling, Frederick..... 2, 6, 873, 938, 1744
 Kelley, Mrs. Florence..... 74, 104,
 102, 125, 193-202, 226, 320, 321, 322, 328, 334, 325,
 326, 327, 328, 329, 330, 330a, 363, 449, 476, 512-636,
 594, 618, 619, 650, 662, 975, 1091, 1122, 1157, 1158,
 1317, 1339, 1418-1421, 1506, 1597, 1652, 1791
 Kelley, Mary R. G..... 1745
 Kelley, Patrick H..... 673
 Keeling, Paul U..... 1318
 Kendall, Henry P..... 330, 365
 Kennard, Howard P..... 1004
 Kennedy, A. K. Clark..... 967
 Kennedy, Albert J..... 356
 Kennedy, Ambrose..... 695
 Kennedy, James B..... 1598
 Keayan, Ruth..... 1066
 Kenyon, William S..... 686, 799
 Kestner, Fritz..... 1123, 1214
 Kettlwell, John E..... 937
 Key, Ellen K. S..... 294
 Kidders, Owen F..... 1422
 King, Frederick A..... 1423
 Kingsbury, John A..... 297, 328
 Kingsbury, Susan M..... 527, 1599
 Kinney, Michael..... 811
 Kirkland, James H..... 208, 320, 323, 1600
 Kitchin, William W..... 620
 Kittermaster, D. B..... 940
 Knowland, Joseph R..... 676
 Knowles, G. W..... 1746
 Kober, George M..... 321, 1792
 Köhne, Paul..... 845
 Kohn, August..... 1265, 1266
 Kramers, Martine G..... 999
 Kraus, Sigmund..... 771
 Kroll, Grace..... 1394
 Krows, A. E..... 1340
 Kueschle, B. E..... 1424
 Kühne, Alfred..... 845
 Kydd, Samuel..... 941
 Labour year book..... 942
 Ledoff, Isidor..... 209
 Landmann, Jul..... 1026
 Lapp, John A..... 22, 1601
 Larcom, Lucy..... 1267
 Laselle, Mary A..... 1747
 Lasker, Bruno..... 956
 Lathrop, Julia C..... 336, 494, 476, 650, 653
 Lanfer, René..... 810
 Langhton, A. M..... 982
 Leake, Albert H..... 1602
 Leavitt, Frank M..... 329, 1602, 1604
 Lederer, Max..... 772
 Leeds, Eng. Education committee..... 943
 Legge, James G..... 1008, 1009
 Legge, Thomas M..... 30
 Lemire, Jules A..... 302
 Lennard, Reginald..... 1069
 Lenroot, Irvine L..... 697
 Leonard, Robert J..... 210, 1605
 Lemer, Ernest..... 849
 Leupp, Constance..... 211
 Levasseur, Émile..... 212
 Lewis, David J..... 640, 712, 713
 Lewis, Ervin E..... 1606
 Lewis, William D..... 621, 622, 650, 653
 Ley, Frank T..... 213
 Lightbody, W. M..... 944
 Lindsay, Samuel McCune..... 214-218,
 321, 322, 324, 325, 327, 328, 329, 330a,
 523, 529, 596, 623, 624, 1607, 1652
 Lindsey, Benjamin B..... 219-223, 294, 320, 324, 639
 Lingie, Mrs. T. W..... 336a
 Little, William C..... 1064
 Lodge, Henry C..... 662
 Logue, Charles H..... 1606
 London, Jack..... 224
 London, Meyer..... 698
 London. County council..... 860,
 1397, 1426, 1426, 1609-1613
 Lees, Isaac A..... 531
 Lord, Everett W..... 102, 226, 323, 324,
 325, 351, 1092, 1268, 1341, 1342, 1427, 1614-1616
 Loriga, Giovanni..... 992, 1793
 Louisiana. Bureau of statistics of labor..... 226
 Lovejoy, Owen R..... 102, 237-244, 264,
 329, 331, 332, 333, 334, 335, 336, 339, 380, 381, 338,
 342, 346, 365, 476, 532-537, 597, 636, 636, 636, 650,
 945, 1070, 1071, 1094, 1095, 1124, 1125, 1159-1161,
 1218-1223, 1343, 1428-1430, 1615-1626, 1794-1796
 Lowell offering..... 1269
 Luotgebrune, Walter..... 1315
 Luke, Jemima..... 340
 Luppe, Hermann..... 826
 Luther, Beth..... 245, 1797
 Macarthur, W..... 246
 MacChesney, Nathan W..... 637, 639
 McCleary, G. F..... 247
 McCracken, Robert M..... 699
 McCulloch, Campbell..... 1072
 McCulloch, Roscoe C..... 700
 McCullough, Joseph A..... 243, 323, 329
 Macdonald, N. C..... 1073
 McDowell, James R..... 324, 528
 McDowell, Mary E..... 101
 McEnnis, John T..... 349
 Macfadyen, Irene M. Ashby..... 250-253, 1370
 Mac Gowan, K..... 1344
 McKelway, A. J..... 254-286,
 320, 321, 322, 323, 324, 325, 326, 327, 328,
 329, 340, 346, 409, 539-542, 628, 629, 650, 653,
 1074, 1271-1277, 1431, 1432, 1627, 1652, 1798

- McLaughlin, James C. 673
 McLean, Francis H. 216, 791, 797
 McLeod, Malcolm J. 287, 298
 McMillan, Margaret. 946, 1628, 1639, 1799
 McNeill, George E. 301
 McWilliams, David. 1254
 Madden, Martin B. 661, 673
 Magruder, Julia. 299
 Main, W. 952
 Maine. Bureau of industrial and labor statistics. 290, 291, 1278
 Committee on industrial education. 1630
 Department of labor and industry. 291
 Malcolm, A. G. 1800
 Mangold, George B. 292, 303, 1483, 1748
 Mann, James R. 673, 712, 713
 Manning, Caroline. 537
 Manning, Henry Edward, cardinal. 877
 Manste, Alexander. 1631
 Marburg, Theodore. 212
 Markham, Edwin. 294,
 1126, 1162-1164, 1226, 1236, 1279, 1280, 1316, 1434
 Marmel, Tarrida del. 1016
 Marot, Helen. 296
 Marshall, Florence M. 1632
 Martin, George H. 1633
 Marx, David. 296, 328
 Maryland. Bureau of industrial statistics. 297, 1801
 Bureau of statistics and information. 542,
 1093, 1245, 1435, 1436
 Commission on industrial education. 1634
 Mason, John. 1346
 Massachusetts. Board of education. 1635, 1636
 Bureau of statistics. 8, 1165
 Bureau of statistics of labor. 1637
 Commissioners for promotion of uniformity
 of legislation. 596
 Commission on industrial education. 1638, 1639
 Commission on minimum wage-boards. 298
 Commission to investigate the inspection of
 factories, workshops, etc. 299
 Constable of the commonwealth. 300, 301
 General court. House of representatives. 302
 Minimum wage commission. 303
 State board of labor and industry. 544-546
 Massachusetts child labor committee. 304, 1437
 Massé, Daniel. 811
 Mather, Sir William. 1638
 Maxey, Edwin. 630
 Medley, K. I. M. 1199
 Meerwarth. 991
 Mény, Georges. 1706
 Merriman, C. 1109
 Merritt, Ella A. 577
 Meyer, H. H. B. 38
 Michigan. State commission on industrial
 education. 1640
 Miles, H. E. 1641, 1649-1651, 1705
 Miller, Marion Mills. 305
 Miller, Wallace E. 306, 322
 Milton, George F. 323, 1642, 1643
 Minneapolis vocational survey committee. 1749
 Minnesota. Bureau of labor. 307-309
 Minor, Jeanie V. 325, 549
 Minton-Senhouse, Robert M. 947
 Mises, Ludwig von. 773
 Missouri. Bureau of labor statistics and in-
 spection. 339
 Senate wage committee for women and
 children. 311
 Mitchell, John. 102, 312, 1227, 1895
 Montague, J. F. 349
 Montessori, Maria. 1226
 Montgomery, Louise. 313, 1894
 Moore, J. Hampton. 712
 Moore, John T. 1262
 Morant, R. L. 1637
 Morgan, John H. 314, 322, 328, 559
 Morrell, E. de V. 661
 Morrison, Henry C. 235, 551
 Mosby, Thomas S. 325
 Moses, Mabelle. 537
 Mosso, Angelo. 1895
 Mote, Carl H. 22, 1698
 Motley, James M. 1644
 Moulder, Priscilla E. 943, 1645
 Moulton, John G. 44
 Muench, Hugo. 532
 Muensterberg, Hugo. 1646
 Mundella, A. J. 949
 Murdoch, Mrs. W. L. 316, 326, 328, 330a
 Murphy, Edgar G. 73, 317, 318, 631, 682
 Musick, Samuel H. 1647
 Munsey, Mabel H. B. 319
 National association of manufacturers of the
 United States. 1649-1651
 National child labor committee, N. Y. 320-331,
 552, 553, 633-636, 726, 1094, 1095, 1127,
 1167, 1272, 1282, 1442-1444, 1653, 1897
 National civic federation review. 1290
 National conference of charities and correc-
 tion. 354
 National conference on prevention of desti-
 tution. 951, 952
 National conference on vocational guidance. 1653,
 1658, 1659
 National consumers' league. 355
 National education association. 1654, 1655
 National federation of settlements. 356
 National society for the promotion of indus-
 trial education. 1656, 1657
 National vocational guidance association. 1658, 1659
 Nearing, Scott. 257-260,
 1168, 1283, 1445-1447, 1690, 1896
 Neill, Charles P. 321, 361, 421
 Nelson, Nell. 249
 Netherlands (Kingdom), 1815. 1090
 Directie van der arbeid. 1091, 1199
 Laws, statutes, etc. 1092
 New Hampshire. Children's commission. 555
 New Jersey. Bureau of statistics of labor and
 industries. 362, 363
 Commission on industrial education. 1661
 New South Wales. Royal commission. 976
 State children's relief department. 1448
 Statistician's office. 977
 New York (City). Bureau of child hygiene. 556
 New York (State). Bureau of factory inspec-
 tion. 557
 Bureau of labor statistics. 364, 1096, 1170, 1662
 Bureau of statistics and information. 1097
 Commission on relief for widowed mothers. 39
 Department of labor. 23, 538, 1254

- New York (State). Education department. 24,
46, 1063, 1064
Factory investigation commission. 365, 366
New York. Public library. 33
New York child welfare exhibit, 1911. 367
Newell, Mary H. 328, 368
Newman, Pauline M. 329
News and Courier, Charleston, S. C. 1265, 1266
News and Observer, Raleigh, N. C. 677
Nichol, Henry. 328, 368
Nicholes, Anna E. 559
Nicholls, Samuel J. 713
Nichols, Francis H. 1229
Nichols, J. Howard. 73
Nicksy, Walther. 853
Nienburg, Bertha von der. 373
Noble, D. 1809
Nolan, John I. 701
North Carolina. Bureau of labor and print-
ing. 370
Norway. Laws, statutes, etc. 1010
Nova Scotia. Factories' inspector. 978
Joyce, William. 321, 342, 371, 1004, 1065
Nudd, Howard W. 1666
Dates, Austin. 1456
Dates, W. H. 69, 70, 328, 1810
Dennauer, Marie Louise. 373, 373, 1068
Dencranis, Louise C. 1320
Dgburn, William F. 500, 1667
Dgden, C. K. 1505
Ohio. Industrial commission. 374, 561, 1201
State board of health. 1811
Okey, Mrs. Thomas. 993
O'Leary, Wesley A. 1668
Oliver, Henry K. 300
Oliver, Sir Thomas. 1812, 1813
Ontario. Laws, statutes, etc. 979
Orchardson, C. 440
Oregon. Board of inspectors of child labor. 375
Child welfare commission. 376
Industrial welfare commission. 377
O'Reilly, Mary Boyle. 1105
Ort, Jan. 1003
Ortu, F. Cocco. 990, 994
Otey, Elizabeth L. 572, 1285
Oteuw, Léon de. 1669
Oage, Anna B. 751, 980
Oage, Arthur W. 1670
Oage, Robert N. 702
Oalmer, Walter B. 1286
Oark, Robert E. 1233
Oarker, Lewis W. 323, 1671
Oarkinson, Thomas I. 638-643
Oarkman, T. I. 330
Oarsons, Frank. 47
Oarsons, James. 1750
Oarton, Mabel. 527
Oaul, Edeu. 147
Oauling, James K. 1457
Oayan, Edouard. 813
Oencock, Netta. 1004
Oencock, Robert. 1403, 1458
Oearne, C. G. 327, 1652
Oearson, Robert H. 1814
Oeck, J. W. 951, 1751
Oelkott, Jessica B. 330
Oelham, Herbert S. 953
Pennsylvania. Bureau of vocational educa-
tion. 562, 563
Department of labor and industry. 1202
Governor. 378
Pennsylvania child labor committee. 188,
379, 564, 563
Pennypacker, Mrs. Percy V. 329
Perrin, John W. 1672
Perry, Arthur R. 650, 1268
Persons, Charles E. 527
Peters, A. J. 327, 1652
Philadelphia. Board of public education.
Pedagogical library. 48
Vice commission. 1459
Philippine Islands. Bureau of printing. 1673
Pieper, August. 854
Pierce, Franklin. 644
Platt, Edmund. 703
Pollitzer, Johann. 1674
Poole, Ernest. 1400-1462
Pope, Samuel. 954
Popp, Adalheld. 774
Porter, George R. 965
Porter, Giles. 102
Porter, H. F. J. 1463
Portugal. Laws, statutes, etc. 1048
Potter, Zenas L. 327, 366, 1039, 1100, 1442, 1404, 1652
Pou, E. W. 713
Praete, Frank C. 1105
Pratt, E. E. 381
Pray, K. L. M. 382
Prelle de la Nieppe, E. de. 855
Price, W. D. 1318
Profumo, L. G. 995
Progressive party, New York. 384
Prosser, Charles A. 1635
Puffer, Joseph Adams. 1675
Quimby, Harriet. 1348
Quin, Percy E. 713
Quinn, Lillian A. 1442, 1466
Rafta, Charles H. 1403
Ragsdale, J. Willard. 712, 713
Ramaix, de. 752, 792
Rambousek, Josef. 80
Randall, Charles H. 704
Rankin, Mildred. 297
Rauchberg, Heinrich. 385
Reber, Louis E. 1705
Reed, Mrs. Anna Y. 1676
Reeder, Charles Wells. 34
Reeves, Edith. 527
Reigart, John F. 1677
Rains, Ettore. 996, 1249
Renard, Georges. 814
Revena y Alsamora, Antonio. 1021
Rhode Island. Bureau of industrial statistics. 386
Commissioner of public schools. 1678
Rich, Edith J. 733
Rich, Jessie P. 329, 1150
Richards, Charles R. 18, 25, 1654, 1662
Richmond, Mary F. 387
Richmond, Va. Vocational education sur-
vey. 1752
Ricketts, Edwin D. 705
Rigby, Lillian M. 1753
Rils, Jacob A. 129, 1171, 1172, 1467
Robbins, H. 74
Roberts, Charles. 1813

Roberts, Peter.....	388, 1230, 1288	Siegel, Isaac.....	710
Robinson, Clarence C.....	389	Sigg, Jean.....	1176
Robinson, Harriet J.....	1289	Simon, Helene.....	854
Robinson, Joseph T.....	657	Simon, Frew.....	969, 1117
Rochester, Anna.....	329, 334, 346, 390, 391, 645, 650, 653, 1110, 1290	Sinclair, Eunice.....	399a
Rogers, John J.....	672, 713	Small, J. C.....	1612
Roosevelt, Theodore.....	326, 392-395	Smart, G. B.....	981
Rose, Marie L.....	297	Smith, A. E. Stanley.....	909
Roseboro, Viola.....	306	Smith, Addison T.....	711
Ross, G. F.....	327, 1652, 1816	Smith, Anna T.....	1535
Ross, William E.....	397	Smith, Charles F.....	325, 491
Rossi, Alessandro.....	997	Smith, Constance.....	374, 952, 969
Rosselle, Edward M.....	102, 565	Smith, Elizabeth Oakes.....	1471
Rotch, Thomas M.....	1817	Smith, Hoke.....	497
Rowntree, B. Seeborn.....	793, 956	Smith, Oliver C.....	102, 1619
Royal society of arts, London.....	1618	Smith, Ellison A.....	495
Royle, E. M.....	1280	Smedden, David.....	325, 1548, 1695
Rühle, Otto.....	856	Solensten, R. T.....	328, 494
Ruffy, Paul de.....	779, 780	Sorge, F. A.....	495
Runciman, Walter.....	891	Southern conference on woman and child labor.....	496
Russell, Charles E.....	178	Spahr, Charles B.....	497
Russell, C. E. B.....	1378, 1403, 1468, 1469, 1519, 1768	Spain. Instituto de reformas sociales.....	1917, 1918
Russian year book.....	1004	Laws, statutes, etc.....	1919, 1920
Ryan, John Augustine.....	35, 327, 1652	Spalding, John L.....	1696
Ryan, W. C., Jr.....	1535	Spangenberg, Hans.....	858
Ryff, Mme.....	1028	Spargo, John.....	495, 1472
Sadler, Michael E.....	26, 800, 1009, 1679	Spaulding, F. E.....	1957
Sakolaki, A. M.....	438, 1700	Spencer, Amy H.....	955
Samuel, Herbert.....	743	Stake, Chas.....	1473
Sandiford, Peter.....	957, 1291	Stephens, George A.....	1698
Sanger, Robert C.....	1075	Stetson, George R.....	1830
Sanville, Florence L.....	398, 1269, 1293	Stevens, Alzina P.....	108, 262
Sargent, Frank B.....	727	Stieda, Wilhelm.....	756, 859
Savoy, Émile.....	1690	Stiles, Ch. Wardell.....	1298
Schaeffer, Nathan C.....	322, 1681	Stimson, Frederic J.....	568, 599
Schall, Thomas D.....	706	Stoddard, William L.....	1246
Schiff, Walter.....	775	Stovall, A. T.....	328, 599
Schindler, Solomon.....	440	Stowe, Lyman B.....	1474
Schneider, Herman.....	326, 1692	Stratton, George F.....	255, 499
Schroeter, Jakob.....	1005	Sullivan, James D.....	1662, 1664
Schultze.....	857	Sumner, Helen L.....	54, 123, 578, 577
Schuls, M. von.....	826	Sumner, Mary B.....	410
Schwimmer, Rosika.....	781	Swan, Charles H.....	411
Schwittau, G.....	1006	Swaysland, E.....	1623
Schwyzler, Eugen.....	1029, 1173	Sweden.....	1919, 1912
Scott, John R. K.....	707	Laws, statutes, etc.....	1913
Scott, Jonathan French.....	1683	Swift, W. H.....	328, 329, 330, 330a, 412, 870, 1295
Scott, Laura.....	125, 566	Tagus, Peter F.....	713
Scott, Nathan B.....	662	Talbot, Ernest L.....	412, 1754
Sears, Horace S.....	73	Tawney, James A.....	961
Sears, William J.....	708	Tawney, R. H.....	952, 961, 962, 967
Seddon, A. E.....	269, 323, 1272	Taylor, Florence I.....	341, 571, 1280, 1294, 1621
Seddon, Alfred A.....	1294, 1684	Taylor, Graham.....	321, 414
Seldi, E.....	1231	Teleky, Ludwig.....	1822, 1823
Selig, Mathilde L.....	297	Tennessee. Dept. of shop and factory in- spection.....	415
Seligman, Isaac N.....	324, 399	State library, Nashville.....	9
Selley, Ernest.....	1076	Terhune, Leola B.....	1476
Sergeant, Elizabeth S.....	1174, 1175	Texas. University. Department of exten- sion.....	10
Sewall, Hannah R.....	400	Thackrah, Charles T.....	1834
Shadwell, Arthur.....	754	Thompson, Holland.....	1297
Sheets, Nellie F.....	567	Thompson, Laura A.....	49
Sherard, Robert H.....	958, 1470	Thompson, William G.....	1525
Sherley, Swagar.....	713	Tillman, Benjamin R.....	962
Sherwood, Sidney.....	297	Todd, Helen M.....	416
Shorey, Eva L.....	290, 1101		
Shouse, Jewett.....	709		

- Tompkins, Juliet W. 417
 Towson, C. R. 418
 Trautsmansdorff, Ferdinand, *Graf von* 776
 Travers, John C. 267, 1836
 Trembeheere, H. S. 899
 Troutman, Robert B. 648
 Trumbull, Millie E. 327, 1652
 Tuckwell, Gertrude M. 963, 969, 1179
 Tyler, Ina. 1482
 Ueland, E. 1755
 Ulm, Aaron H. 269, 419, 1272
 United States. Bureau of education. 16, 27, 485, 1535
 Library. 49
 Bureau of labor. 28, 29, 420-422, 572, 573, 757,
 1103, 1111, 1129, 1203, 1266, 1319,
 1320, 1477, 1690, 1691, 1756, 1827
 Bureau of labor statistics. 11, 423, 574, 575, 758
 Library. 31
 Bureau of the census. 728-731,
 1104, 1130, 1299, 1300
 Children's bureau. 40, 424, 576, 577
 Commission on national aid to vocational
 education. 1692
 Congress. House. 661, 668, 673, 678, 712-714
 Committee on labor. 649-653
 Committee on rules. 1105
 Committee on the District of Colum-
 bia. 578-580, 1693
 Committee on the judiciary. 654
 Senate. 662, 669-671
 Committee on interstate commerce. 655-657
 Immigration commission. 1478, 1479
 Industrial commission. 425
 Laws, statutes, etc. 581, 658, 659
 Library of Congress. Division of bibliog-
 raphy. 12, 17, 29, 38
 Surgeon-general's office. Library. 32
 Urwick, Edward J. 964, 1480, 1694
 Valden, V. 1695
 Valesh, Eva McD. 426, 582, 583
 Van der Vaart, *Mrs. Harriet*. 322, 584, 1181
 Van Dyke, Carl C. 715
 Van Kleeck, Mary. 325, 1112, 1180-1182, 1204
 Van Vorst, Bessie. 427-429, 1301, 1302
 Van Vorst, *Mrs. John*. *See* Van Vorst, Bessie.
 Van Vorst, Marie. 429, 1302
 Vance, A. T. 322
 Vane, William B. 713, 716
 Veditz, Charles William A. 759,
 777, 794, 815, 860, 998, 1030
 Vermeersch, Arthur. 795
 Verrill, Charles Henry. 36
 Victorian year book. 982
 Villard, O. G. 660
 Villermé, Louis René. 816, 1303
 Villota y Presilla, Isidro de. 1021
 Vocation bureau, Boston. 1757-1759
 Vocation office for girls, Boston. 1760
 Vocational guidance survey, N. Y. 1696
 Wagner, Robert F. 365, 366
 Wald, L. D. 324, 330a, 430
 Walling, William E. 431
 Ward, Grace F. 527
 Warner, C. F. 1638
 Washington, Booker T. 1233
 Washington (State) Bureau of labor. 1106
 Washington University, St. Louis. 1482
 Watson, Elizabeth C. 338, 365, 366, 1161, 1183-1185
 Watson, E. J. 325, 482, 585
 Watson, Frank D. 433, 1697
 Watson, Walter A. 712, 713, 717
 Wandby, William S. 434, 1232
 Waugh, Benjamin. 1483
 Waxweiler, Emilie. 791
 Wayne, Flynn. 435
 Weaver, Eli W. 436, 1698, 1761, 1762
 Weaver, Zebulon. 230a
 Webb, Beatrice P. 965, 966
 Webb, Edwin Y. 718
 Webb, Sidney. 924, 935, 966
 Welcker, Hans. 845
 Wells, Emilie L. 437
 Welpton, W. P. 1699
 Weltner, C. E. 328, 1304
 Wentworth, Laura F. 1511
 Weyl, Walter E. 438, 1700
 White, Frank M. 439, 1701
 White, Henry. 1186
 White, Sophie D. 586
 Whitehouse, John H. 967
 Whittin, Ernest S. 587, 1107
 Whittlesey, Sarah S. 588
 Whittemore, Gilbert E. 325, 782, 1702
 Whittier, John G. 340
 Wiese, Dr. 832
 Wilcox, W. R. 1206
 Wiley, Katherine E. 1747
 Wilhelm, L. 828
 Will, Thomas E. 108
 Williams, John. 324, 733
 Williams, Mornay. 329, 1485
 Williams, Talcott. 1305
 Williamson, Charles C. 33, 37
 Williamson, Emily E. 589
 Williamson, Robert. 968, 1207
 Willis, W. N. 1187
 Willoughby, William F. 441
 Willows, Maurice. 326, 1486
 Wilmarth, Raymond O. 442
 Wilmer, C. B. 443
 Wilson, Francis. 1338, 1355-1359
 Wilson, Hilda. 1594
 Wilson, Lewis A. 24, 46
 Winship, A. E. 1487
 Winslow, Charles H. 1501, 1703
 Winston, G. T. 330a
 Wirth, Clara. 1188
 Wirth, Max. 1031
 Wischnewetzsky, Florence Kelley. *See*
 Kelley, *Mrs.* Florence.
 Wisconsin. Bureau of labor and industrial
 statistics. 444, 445, 1488
 Commission upon plans for experiments of
 industrial and agricultural training. 1704
 Industrial commission. 446, 447
 Laws, statutes, etc. 1489
 State board of industrial education. 1705
 Wise, Stephen S. 325, 448, 449
 Wolf, Solomon. 1359
 Women's educational and industrial union,
 Boston. 1321
 Womer, Parley P. 450, 1490
 Wood, George H. 970, 971
 Wood, *Mrs. Mary I. S.* 451

Wood, William R.....	719	Worcester, Wood F.....	1298
Woodbridge, Alice L.....	108	Woycieki, Alexandre.....	1007
Woods, Robert A.....	356, 546	Wright, Carrell D.....	15, 307, 422, 1707
Woodward, Margaret.....	453	Wright, Livingston.....	1408
Woodward, S. W.....	321, 453	Year-book of social progress.....	873
Woolley, Mrs. Helen B. T.....	327, 454, 455, 368, 1633, 1704, 1836	Young, Thomas M.....	1307
Woolley, R. W.....	1306	Zanten, J. H. van.....	700
Woolston, Florence.....	1469	Zentralstelle für Volkswohlfahrt.....	1706
Worcester, Daisy W.....	454, 1306	Zinsli, Ph.....	1033
		Zürcher, E.....	1033, 1034

SUBJECT INDEX.

[Numbers refer to items, not to pages.]

Accidents.....	31, 139, 144, 374, 933, 1319	Bags, paper.....	1152
Age, physiological.....	1765, 1771, 1793, 1817, 1822	Baltimore.....	297, 543, 1826
Age limit.....	201, 285, 575, 577, 1227, 1287	Agri.....	1054
Connecticut.....	125	Mer. estab.....	1193
Illinois.....	196	Stage.....	297, 1329
France.....	796, 804	Best fields of Colorado.....	1060
Germany.....	832	Belgium.....	758, 782-795
<i>See also</i> Legislation.		Home work.....	1140
Agricultural work.....	1049-1076	Legis.....	606, 757, 783-796, 798, 792, 795
Austria.....	1052	Mines.....	782, 1208
France.....	796	Beveridge child-labor bill.....	601-605, 608, 630, 632
Germany.....	823, 1050, 1051	Bibliographies:	
Gt. Brit.....	895,	Apprenticeship.....	13-15, 1680, 1683
955, 1049, 1056-1058, 1062-1066, 1069, 1076		Child labor.....	1-12,
U. S.....	1053-1055, 1059-1061, 1067, 1068, 1070-1075	109, 111, 204, 390, 420, 446, 447, 473, 734, 756,	
Alabama.....	69-73, 79, 190, 252, 253, 317, 328, 329, 330a	817, 818, 839, 853, 963, 964, 873, 899, 990, 1027	
Comp. educ.....	458, 577	Comp. educ.....	16, 1535
Cotton.....	1301	Cont. schools.....	1679
Inspection.....	69-71	Eight-hour day.....	17
Legis.....	253, 458, 459, 572, 573, 575, 577	Indus. educ.....	18-28,
Alaska, legislation.....	577	1504, 1537, 1602, 1604, 1630, 1654, 1683	
American Federation of Labor.....	97,	Indus. hyg.....	29-32
102, 124, 158-164, 312, 565		Juv. employ. bur.....	1737, 1744
Apprenticeship.....	364,	Minimum wage.....	33-37
438, 1513, 1514, 1525, 1533, 1540, 1571, 1592, 1683		Mothers' pensions.....	34-40
Bibl.....	13-15, 1680, 1683	Vocational guidance.....	41-49, 1508-1510
Austria.....	1674	Street trades.....	1382, 1394
British Guiana.....	1631	Birth certificates.....	348, 549
Cape of Good Hope.....	1521	Birmingham, Eng.....	890, 968
France.....	1532-1559	Juv. employ. bur.....	1712-1716, 1730, 1737
Germany.....	1562, 1580, 1639, 1708	Street trades.....	1403
Great Britain.....	871, 872,	Biscuit factories, Maryland.....	1098
889, 922, 942, 1547, 1571, 1610, 1612, 1613		"Blind alley" occupations. 961, 1506, 1544, 1576, 1696	
Massachusetts.....	1637	<i>See also</i> Juvenile occupations.	
New York.....	364	Boot and shoe industry, Mass.....	429, 1321
Phil. Is.....	1647, 1673	Bootblacks.....	1370, 1382, 1394, 1452, 1460, 1476, 1479
Scotland.....	1560	Boston:	
Switzerland.....	1680	Employ. cert.....	576
United States.....	1608, 1644, 1649-1651, 1700, 1707	Juv. occup.....	1731, 1758, 1759, 1760
Wisconsin.....	446	Newsboys' court.....	1382, 1394, 1454, 1493
Argentine Republic.....	1035, 1036, 1037	Newsboys' Republic.....	1394
Arguments, pro and con.....	89, 91	Street trades.....	1371, 1374, 1394, 1402
Arizona, legis.....	474, 573, 575, 577	Voc. bureau.....	1757
Arkansas, legis.....	539, 573, 575, 577	<i>See also</i> Massachusetts.	
Artificial flowers:		Box factories.....	357, 1098, 1152, 1316, 1317, 1320
Great Britain.....	1152	Bradford, Eng.: Juv. employ. bur.....	1723
New York City.....	1133, 1180	Juv. occup.....	1717-1722
Artist child. <i>See</i> Stage children.		Brazil.....	1038
Australia.....	974, 976, 977, 982	Bricks and tiles.....	1315, 1316
Austria.....	696, 734, 742, 752, 758, 761-777, 817	British Guiana.....	1631
Agri.....	1052	Building trades.....	1612, 1613, 1752
Bibl.....	768, 771	Bulgaria.....	1039
Coal.....	1231	Caddies, Great Britain.....	893
Legis.....	735, 750, 757, 777, 812	California.....	93, 94, 330
Night work.....	767, 768	Canneries.....	1080
School children.....	832, 1528		

- California, legis. 469, 573, 575, 577
 Cambridge, Eng., Juv. emp. bur. 1742
 Canada 975, 981
 Indus. educ. 1520
 Legis. 973, 979, 980
 Candy factories 357, 1008, 1310, 1316, 1317, 1328
 Canneries 1077-1107
 Statistics 1103, 1104
 California 1080, 1091
 Florida 1085
 Gulf coast 1078, 1079, 1086-1089, 1095
 Illinois 1091
 Maine 1101
 Maryland 297, 1090, 1093, 1098
 Mississippi 1095, 1102
 New England 1092
 New York State 1081-1085,
 1091, 1094, 1096, 1097, 1099, 1100, 1105
 Washington (State) 1106
 Cans and boxes, tin 1320
 Cape of Good Hope 1521
 Cardiff, Wales 1725
 Juv. employ. bur. 1725
 Care committees. *See* Juvenile employment
 bureaus.
 Cash girls. *See* Mercantile establishments.
 Causes of child labor 186,
 294, 335, 338, 339, 422, 1142, 1601
 Parental dependence 151,
 193, 223, 230, 280, 326, 368, 404
 Poverty 56, 151, 195, 207, 209, 258, 326, 328, 505
 Certificates. *See* Birth certificates; Employ-
 ment certificates.
 Chain making:
 Great Britain 1174
 Massachusetts 1165
 Chemnitz, Germany 822
 Chicago 100, 101, 429
 Candy factories 1310
 Employ. cert. 559
 Juv. employ. bur. 1727
 Juv. occup. 1727, 1729, 1754
 Stockyards 313, 413
 Street trades 1379, 1380
 Voc. train. 1529
 Child idleness 315
 Chimney sweeps:
 Great Britain 916, 917, 930, 1547
 Church and child labor 180, 229, 232, 353, 386, 450
 Cigars and cigarettes 1168, 1320
 Cincinnati 454, 1706
 Juv. employ. bur. 1724
 Street trades 1385
 Voc. guid. 1724
 Clocks and watches 1320
 Clothing 429, 1108-1112, 1178, 1320
 Coal. *See* Mines.
 Colonies, Great Britain 973-982
 Colorado 122
 Beet fields 1080
 Legis. 573, 575, 577
 Stage 1331, 1339
 Compulsory education 485,
 522, 1534, 1535, 1563, 1566
 Bibliography 16, 1535
 Alabama 458
 Compulsory education, Connecticut 1672
 District of Columbia 580, 1668
 European countries 1579
 France 1685
 Germany 1685
 Great Britain 895, 920, 1566, 1598, 1599, 1574, 1685
 Kentucky 113, 1530
 Louisiana 1617
 Massachusetts 545, 1672
 Minnesota 307
 South 1538, 1581, 1582, 1642, 1643, 1652
 South Carolina 1286
 Switzerland 1027
 United States 577, 1548,
 1570, 1587, 1591, 1596, 1613,
 1619, 1633, 1667, 1671, 1695
 Legis. 1535, 1663, 1694
 Wisconsin 446
 Confectionery. *See* Candy factories.
 Connecticut 102, 125-127
 Age limit 125
 Comp. educ. 1522, 1672
 Employ. cert. 576
 Legis. 125, 487, 494, 572, 573, 575, 577
 Physical condition 1770
 See also Hartford.
 Conservation of childhood 142, 392-394, 1586
 Constitutionality of Federal law 602,
 607, 608, 610, 613, 622, 627, 630, 638-
 643, 644, 648, 650, 653, 654, 691, 692
 Consumer and child labor 209
 Continuation schools 1679
 Bibliography 1679
 Germany 845, 1505
 Great Britain 1509, 1611
 Pennsylvania 563, 573, 575, 1641
 United States 1649-1651
 Wisconsin 1705
 Core making 1330
 Corset manufacture 127, 1320
 Cotton mills 572, 1004,
 1235, 1238, 1239, 1240, 1247, 1248, 1249,
 1254, 1258, 1275, 1282, 1286, 1290, 1296
 History 1285
 Mortality of operators 1296, 1298
 Statistics 729, 1298, 1300
 Workers' budgets 1286
 Alabama 1301
 Connecticut 127
 France 816, 1303
 Georgia 1236a, 1262, 1301
 Great Britain 955
 Lancashire, Eng. 1241, 1264, 1287
 New Orleans 1261
 North 1301
 North Carolina 1243, 1272, 1297
 South 1236, 1237, 1262, 1259, 1260-1262,
 1270-1277, 1281, 1294, 1295, 1302, 1306
 South Carolina 1265, 1266, 1272, 1304
 United States 1298, 1307
 Cotton picking, Texas 1067, 1290
 Court decisions. *See* Decisions of courts.
 Crackers and biscuits 1329
 Cranberries 1059, 1070-1072, 1073
 Crime, and child labor. *See* Juvenile delin-
 quency.

- Dangerous occupations..... 706, 807,
 912, 1228, 1311, 1773, 1783, 1811-1814
 Employments prohibited..... 485, 577
 See also Accidents; Occupational diseases.
 Decisions of courts..... 574, 575, 586
 Delaware..... 137, 138
 Agri..... 1054
 Legis..... 572, 573, 575, 577
 Democracy and child labor..... 327
 Denmark..... 734, 752, 817, 1550
 Legis..... 812, 1040-1045
 Department stores. *See* Mercantile establish-
 ments.
 Devon, Eng..... 954
 Dinner toters..... 128
 District of Columbia..... 104, 105, 136, 361,
 442, 453, 578-580, 661, 662, 664, 666-671, 1432
 Comp. educ..... 580, 1693
 Legis..... 470, 500, 520, 573, 575, 577, 581
 Statistics..... 728
 Edinburgh..... 951
 Juv. employ. bur..... 1751
 Educational aspects..... 58,
 122, 140, 186, 198, 327, 368, 1401, 1708
 Educational test for working children..... 1536
 See also Employment certificates.
 Effects of child labor..... 66,
 67, 122, 155, 194, 214, 215, 221, 222, 226, 257,
 275, 284, 321, 329, 330, 335, 338, 339, 1142, 1808
 Adult wages..... 102, 191, 312, 422
 Health..... 1768-1770, 1774-1781,
 1784-1788, 1791-1794, 1798-1802, 1807, 1810,
 1812, 1813, 1815, 1817, 1819, 1822-1826, 1828
 Morals..... 199, 790, 1372, 1379, 1403, 1428, 1459, 1816
 See also Juvenile delinquency; Social cost
 of child labor.
 Efficiency, relative, of men, women, and
 children..... 422
 Eight-hour day. *See* Hours.
 Employers' attitude..... 146,
 179, 186, 370, 382, 426, 928, 1698
 Employment certificates..... 485, 508, 535, 575, 590
 Chicago..... 559
 Connecticut..... 576
 Great Britain..... 906
 Maine..... 290
 Maryland..... 267, 543, 576
 Massachusetts..... 576
 New York City..... 467, 556, 1774, 1782
 New York State..... 567, 558, 576
 Ohio..... 561, 576
 Pennsylvania..... 562
 Wisconsin..... 576
 Employment offices. *See* Juvenile employ-
 ment bureaus.
 Employment prohibited. *See* Dangerous oc-
 cupations.
 England. *See* Great Britain.
 Entrance to trades. *See* Apprenticeship.
 Ethical aspects..... *See* Apprenticeship. 208
 European countries..... 734-760, 899
 Comp. educ..... 1535, 1570
 Indus. educ..... 1537, 1638
 Statistics..... 817
 See also under names of countries.
 European war and child labor..... 1567, 1568
 Factories..... 660, 718
 France..... 799, 803
 Germany..... 837, 854
 Great Britain..... 865, 879, 883, 892, 898,
 900, 905, 915, 918, 919, 926, 941, 942, 948, 965, 967
 See also under name of industry.
 Factory inspection..... 314, 749
 Alabama..... 60-71
 France..... 808
 Germany..... 299
 Great Britain..... 299
 Illinois..... 101, 299
 Maine..... 290
 Maryland..... 297
 Massachusetts..... 299, 300
 New York State..... 299
 New Jersey..... 299
 Nova Scotia..... 978
 Ohio..... 299, 455
 Pennsylvania..... 299
 Pittsburgh..... 195, 1317
 United States..... 1827
 Wisconsin..... 299
 Factory schools..... 1668
 See also Continuation schools; Industrial
 education.
 Fatigue..... 1777, 1805
 Federal control..... 330a, 601-690
 Speeches in Congress..... 661-719
 Flax..... 1244
 Florida..... 279
 Canneries..... 1095
 Legis..... 512, 533, 573, 575, 577
 Flower makers. *See* Artificial flowers.
 France..... 796-810, 1685
 Apprent..... 1552-1559
 Comp. educ..... 1685
 Home work..... 1166
 Indus. educ..... 1558, 1559
 Legis..... 606, 734, 744, 752, 757,
 758, 798-800, 805-809, 811-815, 817
 School children..... 632, 1574
 Textiles..... 1303, 1553
 Furniture..... 1152, 1555
 Gary, Ind..... 1594
 General Federation of Women's Clubs..... 167, 451
 Georgia..... 96, 264, 265, 280
 Cotton..... 1236a, 1262, 1301
 Factories..... 1251
 Legis..... 572, 573, 575, 577, 663, 675
 Germany..... 734, 742, 744, 752,
 754, 758, 817-890, 1315, 1685
 Agri..... 823, 1050, 1051
 Apprent..... 1562, 1580, 1637, 1708
 Comp. educ..... 1535, 1685
 Cont. schools..... 845, 1505
 Fact. insp..... 299, 758
 Glass..... 1113, 1116-1118, 1123, 1132
 Home work..... 829, 1138, 1143, 1188
 Ind. educ..... 1304, 1518, 1708
 Juv. employ. bur..... 1727, 1732
 Legis..... 690, 757, 812, 823, 824, 826-829,
 832, 836, 839, 842, 843, 845, 846, 857-860
 Mines..... 1214
 Night work..... 930, 1117, 1118, 1123
 Statistics..... 825, 831, 844

- Germany, Street trades..... 1400
 School attend..... 1574
 Glass industry..... 340, 525, 1113-1132, 1735
 Germany..... 1113, 1116-1118, 1123, 1123, 1314
 Illinois..... 1131
 New Jersey..... 1123
 Ohio..... 1123
 Pennsylvania..... 380, 1123, 1126
 Grand Rapids, Mich., newsboys..... 1308, 1414
 Great Britain..... 441, 445, 861-872
 Accidents..... 933
 Agrl..... 895,
 935, 1049, 1556-1058, 1082-1086, 1090, 1076
 Apprent..... 871, 872, 889, 922, 942, 1547, 1571
 Chimney sweeps..... 916, 917, 930
 Commissions..... 908-900, 923, 923
 Comp. educ..... 895, 920, 1566, 1568, 1569, 1574, 1665
 Cont. schools..... 1569, 1679
 Em. loy. cert..... 906
 Factories..... 865, 879, 883, 892, 898, 900,
 905, 915, 919, 919, 926, 941, 942, 948, 965, 967
 Factory inspec..... 299, 758
 "Half-timers"..... 877,
 885, 908, 911, 914, 943, 957, 964, 1291, 1536,
 1567, 1572, 1573, 1575, 1595, 1629, 1645
 History..... 893, 899, 892, 906-900,
 915-919, 929, 930, 935, 941, 955, 971, 1006
 Home work..... 1134, 1136, 1139, 1141, 1146,
 1147, 1152, 1153, 1157, 1174, 1177, 1179, 1187
 Hours..... 900, 910, 913
 Ind. educ..... 1593
 Juv. employ. bur..... 868, 876,
 877, 951, 972, 1593, 1726, 1727, 1733,
 1734, 1739, 1743, 1744, 1746, 1750, 1753
 Juv. occup..... 896, 897, 922, 1709, 1710, 1738, 1735
 Legis..... 696, 734, 744, 752,
 754, 757, 758, 812, 817, 873, 874, 881, 883, 884,
 887, 888, 891, 902-904, 912-914, 928, 931, 934,
 935, 942, 945, 947, 960, 969, 970, 1047, 1217
 Medical super..... 1779, 1781, 1790
 Mess. boys..... 923, 964
 Mines..... 739, 912, 1208, 1213, 1215-1217
 Min. wage..... 867, 872, 877
 Night work..... 909, 950
 Office boys..... 964
 Post-office boys..... 886, 921, 923, 963, 972
 Stage..... 901, 963, 1337
 Statistics..... 880, 896, 897, 905, 927, 955, 972, 1216
 Street trades..... 891, 964, 1403-1405, 1408-1470, 1481
 Textiles..... 905, 955, 957, 1241, 1244
 Unemploy..... 927, 937, 940, 956, 956
 Van boys..... 963, 964, 969, 1199
 Voc. guild..... 1508, 1593, 1742, 1743
 See also Blind-alley occupations; Bir-
 mingham, Bradford, Cambridge, Lan-
 caster, London, Manchester.
 Great Britain, colonies..... 973-982
 Greece, legislation..... 1046, 1047
 Greek padrone system..... 1476, 1478, 1479
 Grimsby, Eng..... 958
 Gulf Coast States..... 90
 Canneries..... 1078, 1079, 1086-1088, 1095
 See also South, and names of States.
 Gunckel, John E., and newsboys.... 1406, 1407, 1487
 Gymnasts..... 226
 See also Stage children.
 "Half-timers." See Great Britain, "Half-
 timers."
 Hammond, Ind..... 230
 Hartford, Conn..... 1430
 Voc. guild..... 1729
 Hawaii, legislation..... 573, 573, 577
 See also Honolulu.
 Health of working children..... 102, 149, 186,
 245, 297, 386, 845, 964, 1188, 1546, 1708-1726
 History:
 Great Britain..... 307, 883, 889, 892, 899-900,
 915-919, 928, 930, 935, 941, 955, 971, 1006
 United States..... 30,
 51, 123, 245, 263, 463, 464, 572, 587, 588
 Home work..... 329, 525, 1123-1189
 Belgium..... 1146
 France..... 1166
 Germany..... 829, 1128, 1143, 1195
 Great Britain..... 1134-1136, 1139, 1141, 1146,
 1147, 1152, 1153, 1157, 1174, 1177, 1179, 1187
 Massachusetts..... 1165
 Netherlands..... 1169
 New York City..... 1133, 1144, 1146, 1149,
 1151, 1159, 1161, 1167, 1171, 1172, 1175, 1182-1185
 New York State..... 1148, 1170, 1185
 Switzerland..... 1173, 1176, 1189
 United States..... 1123, 1127,
 1143, 1144, 1148-1151, 1154-1165, 1167,
 1170-1172, 1174, 1175, 1178, 1190-1196
 Honolulu..... 82
 Hosiery and knit goods..... 1320
 Hotels and restaurants..... 804, 1309
 Hours of labor..... 465, 575, 577, 1091
 Eight-hour day..... 168, 345, 355, 369, 390, 650, 653
 Bibl..... 17
 Ten-hour day..... 745
 Colorado..... 122
 Connecticut..... 494
 France..... 796
 Germany..... 833
 Great Britain..... 900, 910, 913
 Maine..... 290
 Massachusetts..... 236, 588, 650, 653
 Ohio..... 1301
 Hours, irregular, effect on health..... 1768, 1807
 Hungary..... 732, 778-781
 Idaho, legis..... 573, 575, 577
 Illinois..... 63, 131, 186, 187
 Fact. insp..... 101, 299
 Glass..... 1122, 1131
 Legis..... 457,
 479, 489, 490, 495, 518-521, 550, 573, 575, 577, 584
 Street trades..... 101, 1420
 See also Chicago.
 Immigration, Child labor and..... 182
 Indiana..... 112, 114, 119
 Glass..... 1122
 Indus. educ..... 1590
 Legis..... 482, 495, 550, 573, 575, 577
 See also Hammond.
 Industrial education..... 1499-1501,
 1551, 1601, 1602, 1604, 1683, 1699
 Bibl.. 18-28, 1504, 1537, 1602, 1604, 1630, 1654, 1683
 Infl. on wages..... 1687
 Canada..... 1520
 Europe..... 1537, 1638

Industrial education, France.....	1558, 1559
Germany.....	1504, 1518, 1708
Great Britain.....	1543, 1593, 1609-1613
Illinois.....	1529
Indiana.....	1590, 1594, 1605
Maine.....	1630
Maryland.....	1634
Massachusetts.....	1583, 1605, 1635, 1638, 1639
Michigan.....	1640
New Jersey.....	1661
New York.....	1662
Pennsylvania.....	1651
Rhode Island.....	1678
Switzerland.....	1680
United States.....	1542, 1583, 1594, 1640-1651, 1654-1657, 1665, 1670, 1690, 1692
Wisconsin.....	1650, 1651, 1704, 1705
Industrial hygiene, bibl.....	29-32
<i>See also Occupational diseases.</i>	
Inspection. <i>See</i> Factory inspection.	
Iowa.....	1606
Legis.....	466, 493, 510, 531, 573, 575, 577
Voc. guid.....	1606, 1741
Ireland:	
Agriculture.....	1064
Street trades.....	1416
<i>See also Great Britain.</i>	
Irregular employment.....	157
Italy.....	734, 742, 744, 752, 817, 983-998
Glass.....	696
Legis.....	757, 812, 983-991, 993-998
Stage.....	1349
Japan.....	734, 817
Jewelry.....	1165, 1320
Jute.....	1244
Juvenile delinquency.....	68, 87, 204, 219, 421, 840, 845, 969, 1431, 1579
Rel. to street trades.....	1389, 1392, 1394, 1399, 1401, 1403, 1475, 1477
Juvenile employment bureaus.....	1506, 1755
Bibl.....	1737, 1744
Cooperation with schools.....	830, 1506, 1508, 1512, 1515, 1524, 1594, 1727, 1730, 1751
Birmingham, Eng.....	1712-1715, 1730
Boston.....	1757
Bradford, Eng.....	1723
Cambridge, Eng.....	1742
Chicago.....	1727
Cincinnati.....	1724
Edinburgh.....	1751
Germany.....	1727, 1732
Great Britain.....	876, 877, 961, 972, 1593, 1709, 1710, 1726, 1727, 1733, 1734, 1736, 1738, 1743, 1744, 1746, 1750, 1753
Philadelphia.....	1745
Juvenile occupations.....	75, 76, 896, 897, 922, 1709-1762
Occupations for boys.....	1709, 1717-1720, 1722, 1729, 1733, 1735, 1748, 1754, 1758, 1759, 1762
Occupations for girls.....	1710, 1716, 1721, 1727, 1729, 1731, 1733, 1735, 1747, 1760, 1762
<i>See also Juv. employ. bur.; Voc. guid.</i>	
Kansas, legis.....	573, 575, 577
Keating-Owen bill.....	330a, 613, 620, 634, 637, 638, 640, 641, 653, 659

Keating-Owen bill, Speeches in Congress..	679-719
Kentucky.....	203
Comp. educ.....	113, 1530
Legis.....	550, 567, 573, 575, 577
Kiel, Germany.....	821
Knit goods.....	1320
Lancashire, Eng.....	1519, 1595
Cotton.....	1241, 1264
Legal status of child.....	524
Legislation, foreign countries. <i>See</i> under names of countries.	
Legislation, United States.....	652, 672, 696
Econ. effects.....	494
State legislation and enforcement.....	457-590
Uniform legis.....	591-600
<i>See also Names of states.</i>	
Licenses, Street trading. <i>See</i> Street trades.	
Linen, France.....	816, 1308
Liverpool, Eng.....	958
Street trades.....	1376, 1395, 1403
London.....	951, 952, 958
Apprent.....	1610, 1612, 1613
Cont. schools.....	1611
Home work.....	1139
Ind. educ.....	1543, 1609-1613
Juv. employ. bur.....	1709, 1710
Juv. occup.....	1709, 1710, 1735
School attend.....	1677
Street trades.....	1397, 1425, 1426
Louisiana.....	165, 226
Comp. educ.....	1617
Legis.....	503, 573, 575, 577
Stage.....	1332, 1332
<i>See also New Orleans.</i>	
Lowell, Mass.....	1267, 1269, 1299
Luxemburg.....	752
Legis.....	812
Lynn, Mass.....	429
Maine:	
Canneries.....	1101
Emp. cert.....	290
Fact. insp.....	200, 201
Ind. educ.....	1630
Legis.....	572, 573, 575, 577, 587
Stat.....	290
Textiles.....	1278
<i>See also Portland.</i>	
Manchester, Eng.....	938
Street trades.....	1360, 1378, 1403
Maryland.....	297, 372, 1826
Agri.....	1054, 1055
Canneries.....	297, 1086, 1087, 1090, 1093-1095, 1098
Employ. cert.....	297, 543, 576
Factories.....	1098
Factory insp.....	297
Ind. educ.....	1634
Legis.....	297, 548, 572, 573, 575, 577
Med. super.....	1801
Stage.....	1345
Street trades.....	1435, 1436
Massachusetts.....	99, 107, 123, 236, 301-304, 1321, 1437, 1638, 1784
Apprent.....	1637
Comp. educ.....	545, 1535, 1672
Emp. cent.....	576
Factory insp.....	299-300
Home work.....	1163

- Massachusetts, Hours..... 686, 688, 1343
 Ind. educ..... 1583, 1635, 1638, 1639
 Legis..... 486,
 504, 537, 544-547, 572, 573, 575, 577, 486, 1535
 School attend..... 546
 Statistics..... 298, 724
 Street trades..... 1371, 1374, 1294, 1402, 1437
 Medical supervision..... 1774,
 1779, 1781, 1782, 1790, 1901, 1816, 1828
 Men's clothing. *See* Clothing.
 Mercantile establishments.. 127, 357, 1193, 1207, 1759
 Messenger boys..... 357, 1372, 1373,
 1379, 1382, 1387, 1391, 1403, 1406, 1411, 1418,
 1428, 1429, 1438, 1439, 1447, 1459, 1463, 1480
 Great Britain..... 928, 964
 Minnesota..... 307
 Pennsylvania..... 380
 Metal trades..... 341, 1311, 1313, 1317-1330
 Connecticut..... 137
 Germany..... 1123, 1312
 Michigan..... 213, 287, 288
 Ind. educ..... 1640
 Legis..... 495, 573, 575, 577
 Mills. *See* Factories.
 Milwaukee:
 Newsboys' Republic..... 1424, 1441
 Street trades..... 1440, 1488
 Mines and quarries..... 689, 718, 1208-1233
 Austria..... 1231
 Belgium..... 739, 1208
 France..... 796
 Germany..... 1214
 Great Britain..... 739, 912, 1208, 1213, 1215-1217
 Pennsylvania..... 295,
 380, 1210, 1212, 1220, 1221, 1224, 1230
 United States..... 1209-1212,
 1218-1227, 1229, 1230, 1232
 Minimum age. *See* Age limit.
 Minimum wage..... 197, 261, 303, 373, 384
 Bibliography..... 32-37
 Great Britain..... 867, 872, 877
 Minneapolis..... 1749
 Minnesota..... 307-309
 Comp. educ..... 307
 Legis..... 573, 575, 577
 Messenger boys..... 307
 Statistics..... 307
 See also Minneapolis.
 Missouri..... 116, 119, 310, 311
 Legis..... 572, 575, 577
 Mississippi..... 78, 120, 286, 328
 Canneries..... 1095, 1102
 Legis..... 538, 567, 573, 575, 577
 Montana, legis..... 573, 575, 577
 Mothers' pensions. bibliography..... 38-40
 Mountain whites..... 412
 National child labor committee:
 Aims..... 227
 Constitution..... 344
 Proceedings..... 320-330a
 Secretary's reports..... 331
 Nebraska, legis..... 573, 575, 577
 Needles and pins..... 1320
 Netherlands..... 734, 742, 752, 817, 999-1003
 Home work..... 1160
 Legis..... 812, 1002
 Nevada, legis..... 573, 575, 577
 New England..... 125, 225, 245, 299, 367
 Canneries..... 1092
 Street trades..... 1427
 Textiles..... 1263, 1267-1269, 1289
 See also names of states.
 New Hampshire, legis..... 551, 555, 572, 573, 575, 577
 New Jersey..... 103, 149, 153, 262, 363
 Fact. insp..... 299
 Glass..... 1122
 Ind. educ..... 1661
 Legis..... 500, 572, 573, 575, 577
 Silk..... 1293
 Street trades..... 1377
 See also Newark, Paterson.
 New Mexico, legis..... 573, 575, 577
 New Orleans, La., cotton mills..... 1261
 New South Wales..... 575, 977
 Street trades..... 1408
 New York City..... 120, 145, 267
 Employ. cert..... 467, 556, 576, 1774, 1782
 Home work..... 1123, 1144,
 1146, 1149, 1151, 1159, 1161, 1167,
 1171, 1172, 1175, 1199, 1199-1195
 Mer. est..... 1200, 1204, 1206
 Newsboys..... 1367, 1368, 1457, 1467
 School census..... 1066
 Voc. guild. survey..... 896
 New York State..... 171, 265, 266
 Apprent..... 264
 Canneries..... 1082-1085,
 1094, 1096, 1097, 1099, 1100, 1105
 Employ. cert..... 557, 559, 574
 Fact. insp..... 299
 Home work..... 1148, 1170, 1185
 Ind. educ..... 1062
 Legis..... 497, 507, 572, 573, 575, 577
 Mer. est..... 1194
 New Zealand, legis..... 574
 Newark, N. J., newsboys..... 1457
 Newport survey..... 76
 Newsboys..... 577, 1460, 1461,
 1445, 1451, 1452, 1460, 1461, 1471, 1484, 1567
 Boston..... 1093
 Chicago..... 1373
 Grand Rapids, Mich..... 1398, 1414
 Maryland..... 297, 1435, 1451
 Milwaukee..... 1424, 1441, 1488
 Newark..... 1457
 New York City..... 1267, 1368, 1457, 1467
 New York State..... 1460, 1469
 Philadelphia..... 1381, 1448
 St. Louis..... 1463
 Toledo..... 1406, 1407, 1465
 Wash. D. C..... 1453, 1465
 Newsboys' Court, Boston..... 1382, 1394, 1454, 1465
 Newsboys' Republic, Boston..... 1382
 Newsboys' Republic, Milwaukee..... 1424, 1465
 Night work..... 345, 355, 575, 740, 746, 1167
 Austria..... 767, 774
 France..... 796, 804
 Germany..... 950, 1117, 1118, 1119
 Great Britain..... 909, 914
 Pennsylvania..... 1465
 Switzerland..... 1465
 Northern States.....
 See also New England, and names of states.

- North Carolina..... 164,
 194, 269, 270, 277, 330, 330a, 370, 412
 Cotton..... 1943, 1272, 1287, 1301
 Legis..... 491, 511, 572, 573, 575, 577
 North Dakota, legis..... 573, 575, 577
 Norway..... 752
 Legis..... 812, 1010
 Nova Scotia..... 978
 Occupational diseases..... 1809,
 1811-1814, 1821, 1824, 1825
 Bibl..... 20-32
 Occupations. *See* Juvenile occupations.
 Office boys, Great Britain..... 964
 Ohio..... 306
 Accidents..... 374
 Comp. educ..... 1535
 Employ. cert..... 561, 576
 Fact. insp..... 269, 455
 Glass..... 1122
 Hours..... 1201
 Legis..... 483, 495, 496, 550, 572, 573, 575, 577, 1535
 Mer. estab..... 1201
 Wages..... 1201
 See also Cincinnati.
 Ohio Valley states..... 115, 306, 550
 See also names of states.
 Oklahoma..... 80, 81
 Legis..... 471, 573, 575, 577
 Ontario..... 975, 979
 Oregon..... 375-377
 Legis..... 573, 575, 577
 Min. wage..... 373
 Organized labor and child labor..... 97,
 102, 124, 158-163, 312, 330a
 See also American Federation of Labor;
 Trade unions, Great Britain.
 Palmer-Owen bill..... 625,
 626, 633, 636, 637, 649, 650, 651, 655, 658
 Speeches..... 672-678
 Paper boxes. *See* Box factories.
 Parental dependence. *See* Causes of child
 labor.
 Parental responsibility..... 382, 414
 Part time schools..... 1636, 1652
 See also Continuation schools, Great
 Britain "Half-timers."
 Paterson, N. J..... 123
 Pauperism. *See* Causes of child labor.
 Peddlers. *See* Street trades.
 Pennsylvania..... 109, 110, 143, 156,
 190, 209, 295, 378-380, 388, 394, 433, 564, 653
 Cont. schools..... 563, 1641
 Employ. cert..... 562
 Fact. insp..... 299
 Glass..... 1122, 1125
 Ind. educ..... 1651
 Legis..... 463, 472, 476,
 505, 550, 554, 563, 564, 572, 573, 575, 577
 Mines..... 295, 380, 1210, 1212, 1230, 1221, 1224, 1230
 Night work..... 491
 Street trades..... 1438
 Textiles..... 1238, 1293
 See also Philadelphia, Pittsburgh, Wilkes-
 Barre.
 Perry, N. Y..... 429
 Philadelphia..... 123, 188, 343, 396, 1561
 Philadelphia, Juv. employ. bur..... 1561, 1745
 Juv. occup..... 75
 Mer. est..... 1202
 Stage..... 1459
 Street trades..... 1381, 1440, 1459
 Philanthropy and child labor..... 231
 Philippine Islands:
 Apprent..... 1647, 1673
 Legis..... 577
 Physical standards..... 424, 1765,
 1771, 1774, 1793, 1817, 1819, 1822, 1823, 1828
 Physiological age. *See* Age, physiological.
 Pittsburgh, Pa..... 92, 195, 429, 1168, 1317, 1318
 Portland, Me..... 290
 Porto Rico, legis..... 577
 Portugal..... 752
 Legis..... 812, 1048
 Post-office boys, Great Britain..... 366, 921, 923, 963, 972
 Pottery..... 1320
 Poverty. *See* Causes of child labor.
 Preserving. *See* Canneries.
 Printing trades..... 1533, 1556, 1647, 1673, 1735, 1752
 Providence, R. I., School census..... 1702
 Rag stripping..... 1178
 Religious aspects. *See* Church and child
 labor.
 Remedial measures..... 294, 335, 338, 339, 408, 1142
 Restaurants. *See* Hotels and restaurants.
 Rhode Island..... 386
 Ind. educ..... 1678
 Legis..... 572, 573, 575, 577
 See also Newport, Providence.
 Richmond, Va., Voc. educ. survey..... 1752
 Rolling mills, Germany..... 1123, 1312, 1314
 Roumania..... 752
 Rubber and elastic goods..... 127, 1320
 Russia..... 1004-1007
 Legis..... 752, 812
 St. Louis, Mo.:
 Juv. occup..... 1748
 Newsboys..... 1482
 Scavengers, child..... 1437
 School attendance:
 France..... 1574
 Germany..... 1574
 Great Britain..... 868, 892, 895,
 906, 914, 920, 943, 972, 1566-1569, 1572-1575, 1677
 See also Great Britain, "Half-timers."
 New York..... 1636
 Rhode Island..... 386
 Switzerland..... 1574
 See also Compulsory attendance; Continuation
 schools.
 School children as wage earners..... 1198
 Austria..... 832
 France..... 832
 Germany..... 820
 Great Britain..... 832, 1516, 1517, 1572, 1589, 1766
 See also Gt. Brit. "Half-timers;"
 Street trades.
 Switzerland..... 1189
 Schools, relation to employment..... 534, 1230, 1506,
 1512, 1515, 1519, 1524, 1541, 1600, 1603, 1607, 1614-
 1616, 1618-1623, 1632, 1669, 1690, 1677, 1681, 1682
 See also Comp. educ.; Cont. schools; In-
 dus. educ.; Juv. employ. bur.; Voc.
 guid.

- Scholarships for working children..... 330a,
1377, 1378, 1397, 1680, 1697
- Scotland..... 958
- Agri..... 1064
- Apprent..... 1360
- Voc. guild..... 1733, 1751
- See also* Edinburgh, Great Britain.
- Seattle, Wash..... 1676
- Sharpsburg, Pa..... 1317
- Shoes. *See* Boot and shoe industry.
- Silk mills..... 1234, 1280, 1283, 1296
- Statistics..... 1296, 1299
- Connecticut..... 127
- France..... 816, 1303
- Great Britain..... 956
- New Jersey..... 1293
- Pennsylvania..... 1293
- Social cost of child labor..... 64, 155, 184, 221, 225, 259,
247, 441, 1563, 1785, 1786, 1806
- See also* Effects of child labor.
- Sonneberg, Germany..... 829
- South..... 106, 160, 160,
177, 183, 226, 254, 262, 267, 271-273, 278, 283, 314,
318, 320, 329, 403, 406, 407, 420, 628, 629, 631, 633
- Comp. educ..... 1531,
1535, 1538, 1549, 1581, 1582, 1642, 1643, 1652, 1684
- Cotton..... 1252,
1259, 1260-1262, 1270-1277, 1281, 1302, 1306
- Legis..... 402, 541, 542, 570
- See also* names of states.
- South Carolina..... 194, 248, 260, 270, 277, 328, 329, 432
- Comp. educ..... 1508
- Cotton..... 1206, 1206, 1272, 1304
- Legis..... 511, 573, 575, 577, 585
- South Dakota, legis..... 573, 575, 577
- Spain..... 744, 752
- Legis..... 812, 1014-1021
- Speeches in Congress..... 305, 661-719
- Stage children..... 1322-1359
- Legis..... 577
- Baltimore..... 1329
- Colorado..... 1331, 1339
- Great Britain..... 901, 963, 1337
- Italy..... 1349
- Louisiana..... 1332, 1352
- Maryland..... 297
- State and child labor..... 525, 928, 903
- State and Federal legislation, relation of 498, 606, 614
- See also* Federal control.
- State laws. *See* Legislation, United States.
- Statistics:
- Austria..... 762
- European countries..... 817
- Germany..... 818, 825, 831, 844
- Great Britain. 880, 896, 897, 905, 927, 955, 972, 1216
- Massachusetts..... 298
- Minnesota..... 307
- New South Wales..... 977
- New York State..... 1284
- Rhode Island..... 386
- Russia..... 1004
- Switzerland..... 1188
- United States..... 189, 339, 422
720-733, 1104, 1129, 1130, 1285, 1286, 1288, 1300
- Victoria..... 982
- Stockyards, Chicago..... 313, 413
- Stores, department. *See* Mercantile estab-
lishments.
- Stories, Child labor..... 340, 343, 350, 352
- Strawberry pickers..... 1055
- Street trades..... 202, 329, 1360-1403
- Bibl..... 1232, 1294
- Effect on health..... 1799
- Regulation..... 577, 1388, 1395, 1397, 1399,
1400, 1403, 1404, 1417, 1418, 1420, 1425, 1428, 1435,
1442, 1449, 1450, 1456, 1458, 1464-1466, 1481, 1489
- Boston..... 1371, 1374, 1394, 1402
- Cincinnati..... 1285
- Hartford..... 1410
- Great Britain..... 891,
964, 1360, 1376, 1378, 1403, 1404, 1425
- Illinois..... 1420
- Ireland..... 1416
- Maryland..... 1435, 1436
- Milwaukee..... 1440, 1488
- New Jersey..... 1377
- New South Wales..... 1443
- Wisconsin..... 446, 1488
- See also* Bootblacks; Messenger boys;
Newsboys.
- Sugar beet industry. *See* Beet fields of Col-
orado.
- Sulphur mines..... 1233
- Sweden..... 752, 1008, 1009, 1011, 1012
- Legis..... 812, 1013
- Switzerland..... 734, 752, 758, 817, 1023, 1024, 1027
- Apprent..... 1680
- Bibl..... 1025
- Comp. educ..... 1027
- Home work..... 1173, 1176, 1188, 1189
- Indus. educ..... 1680
- Legis..... 696, 757, 812,
1022, 1025, 1027, 1028, 1030, 1031, 1033, 1084, 1680
- Night work..... 1026
- School attend..... 1574
- Tailoring. *See* Clothing.
- Telegraph boys. *See* Messenger boys.
- Tenement-house manufacture. *See* Home
work.
- Tennessee..... 208, 369, 415, 1252
- Legis..... 573, 575, 577
- Texas:
- Cotton picking..... 1290
- Legis..... 573, 575, 577
- Textiles..... 729a, 1234-1297
- France..... 1563
- Gt. Brit..... 905, 955, 967
- See also* Cotton; Linen; Silk; Woolen.
- Tobacco. *See* Cigars and cigarettes.
- Toledo, Ohio, Newsboys..... 1406, 1407
- Tomatoes..... 1064
- Trade unions, U. S. *See* American Federation
of Labor.
- Trades. *See* Juvenile occupations.
- Unemployment, Gt. Brit..... 927, 937, 940, 956, 956
- Uniform legislation..... 552, 560, 591-600
- United States and general..... 50-458,
734, 742, 752, 754, 817, 1685
- Agri... 1053-1055, 1659-1661, 1667, 1668, 1670-1675
- Apprent..... 1608, 1644, 1649-1651, 1700, 1707
- Canneries..... 1077-1107

- United States, Comp. educ..... 1535, 1548,
1570, 1587, 1591, 1596, 1618, 1619,
1633, 1663, 1664, 1667, 1671, 1685
Cotton..... 1298, 1307
Glass..... 1114, 1115, 1119, 1120, 1122, 1124-1131
Home work..... 1133, 1137,
1143, 1144, 1148-1151, 1154, 1165, 1167,
1170-1172, 1174, 1175, 1178, 1180-1186
Ind. educ..... 1542, 1583,
1594, 1605, 1649-1651, 1654-
1657, 1665, 1670, 1690, 1692
Legis..... 54, 302, 457-590, 812
Uniform..... 591-600
Mer. est..... 1190-1207
Mines..... 1209-1212, 1218-1227, 1229, 1230, 1232
Statistics..... 189, 339, 422, 720-733, 1104, 1129, 1130
Voc. guid..... 1624-1626, 1652, 1655
See also names of states.
Utah, legis..... 573, 575, 577
Vermont, legis..... 572, 573, 575, 577
Vagrancy and child labor..... 132
Van boys, Gt. Brit..... 963, 964, 968, 1199
Victoria..... 982
Vienna..... 1674
Virginia..... 141, 274, 283
Legis..... 573, 575, 577
Vocational education. *See Industrial educa-
tion.*
Vocational guidance..... 825, 1507-1512,
1648, 1675, 1696, 1747, 1756, 1761, 1762
Bibl..... 41-40, 1508-1509
National conferences..... 1653, 1658, 1659
Birmingham, Eng..... 1712-1716, 1730
Boston..... 1731, 1757-1760
Bradford, Eng..... 1717-1722
Cardiff, Wales..... 1725
Chicago..... 1727, 1729, 1754
Cincinnati..... 1724
Edinburgh..... 1751
Germany..... 1508
Gt. Brit..... 1508, 1593, 1742, 1743
Hartford, Conn..... 1739
Iowa..... 1606, 1741
London..... 1709, 1710, 1735
Minneapolis..... 1749
Vocational guidance, New York City..... 1696
Philadelphia..... 1561, 1740, 1745
Richmond, Va..... 1753
St. Louis..... 1748
Seattle..... 1676
United States..... 1594, 1624, 1625, 1652, 1655
Wages..... 212, 1188
Boot and shoe ind..... 1321
Cotton mills..... 1274
Germany..... 832
Illinois..... 186
Iowa..... 1606
Newport..... 76
Ohio..... 1201
North Carolina..... 370
Oregon..... 373
Phila..... 75
Rhode Island..... 386
United States..... 421, 422
Wages, effects on adults. *See Effects of child
labor.*
Wales, Agri..... 1064
See also Cardiff; Great Britain.
Washington, D. C. *See District of Columbia.*
Washington (State):
Canneries..... 1106
Legis..... 573, 575, 577
West Virginia..... 117-119, 1211
Legis..... 550, 573, 575, 577
Western States..... 530
See also names of states.
Wilkes-Barre, Pa..... 77
Wisconsin..... 340, 444-447
Apprent..... 446
Comp. educ..... 446
Employ. cert..... 576
Fact. insp..... 299
Ind. educ..... 1650, 1651, 1704, 1705
Legis..... 446, 495, 502, 573, 575, 577, 1705
Street trades..... 1489
See also Milwaukee.
Woolen and worsted goods..... 955, 1320
Work permits. *See Employment certificates.*
Wyoming, legis..... 573, 575, 577



ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.

AT
20 CENTS PER COPY

△

366.22701

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

MATERNAL MORTALITY

FROM ALL CONDITIONS CONNECTED
WITH CHILDBIRTH

IN THE UNITED STATES
AND CERTAIN OTHER
COUNTRIES

BY

GRACE L. MEIGS, M. D.

MISCELLANEOUS SERIES No. 6

Bureau Publication No. 19



WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

PUBLICATIONS OF THE CHILDREN'S BUREAU.

Annual Reports:

- Third Annual Report of the Chief, Children's Bureau, to the Secretary of Labor, for the fiscal year ended June 30, 1915. 26 pp. 1915.
Fourth Annual Report of the Chief, Children's Bureau, to the Secretary of Labor, for the fiscal year ended June 30, 1916. 37 pp. 1916.

Care of Children Series:

- No. 1. Prenatal Care, by Mrs. Max West. 41 pp. 4th ed. 1914. Bureau publication No. 4.
No. 2. Infant Care, by Mrs. Max West. 87 pp. 1914. Bureau publication No. 5.

Dependent, Defective, and Delinquent Classes Series:

- No. 1. Laws Relating to Mothers' Pensions in the United States, Denmark, and New Zealand. 192 pp. 1914. Bureau publication No. 7. (Out of print. Revised edition in preparation.)
No. 2. Mental Defectives in the District of Columbia: A brief description of local conditions and the need for custodial care and training. 39 pp. 1914. Bureau publication No. 13.

Infant Mortality Series:

- No. 1. Baby-Saving Campaigns. A preliminary report on what American cities are doing to prevent infant mortality. 93 pp. 4th ed. 1914. Bureau publication No. 3. (Bureau supply exhausted. Copies may be purchased from Superintendent of Documents at 15 cents each.)
No. 2. New Zealand Society for the Health of Women and Children. An example of methods of baby-saving work in small towns and rural districts. 18 pp. 1914. Bureau publication No. 6.
No. 3. Infant Mortality: Results of a field study in Johnstown, Pa., based on births in one calendar year, by Emma Duke. 93 pp. and 9 pp. illus. 1915. Bureau publication No. 9.
No. 4. Infant Mortality. Monclair, N. J.: A study of infant mortality in a suburban community. 36 pp. 1915. Bureau publication No. 11.
No. 5. A Tabular Statement of Infant-Welfare Work by Public and Private Agencies in the United States, by Etta R. Goodwin. 114 pp. 1915. Bureau publication No. 16.
No. 6. Infant Mortality: Results of a field study in Manchester, N. H., based on births in one year. — pp. and — pp. illus. 1917. Bureau publication No. 20. (In press.)

Industrial Series:

- No. 1. Child-Labor Legislation in the United States, by Helen I. Sumner and Ella A. Merritt. 1131 pp. 2 charts. 1915. Bureau publication No. 10.
Reprints from the above are also issued as follows:
Child-Labor Legislation in the United States: Separate No. 1. Analytical tables. 475 pp. 2 charts.
Child-Labor Legislation in the United States: Separates Nos. 2 to 54. Text of laws for each State separately.
Separate No. 55. Text of Federal Child-Labor Law. 1916.
No. 2. Administration of Child-Labor Laws:
Part 1. Employment-Certificate System, Connecticut, by Helen I. Sumner and Ethel E. Hanks. 69 pp. 2 charts. 1915. Bureau publication No. 12.
Part 2. Employment-Certificate System, New York, by Helen I. Sumner and Ethel E. Hanks. 164 pp. 3 charts. 1917. Bureau publication No. 17. (In press.)
No. 3. List of References on Child Labor. 161 pp. 1916. Bureau publication No. 18.

Miscellaneous Series:

- No. 1. The Children's Bureau: A circular containing the text of the law establishing the bureau and a brief outline of the plans for immediate work. 8 pp. 1912. Bureau publication No. 1. (Out of print.)
No. 2. Birth Registration: An aid in protecting the lives and rights of children. 20 pp. 3d ed. 1914. Bureau publication No. 2.

(Continued on 54 page of cover.)

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU
JULIA C. LATHROP, Chief

MATERNAL MORTALITY

FROM ALL CONDITIONS CONNECTED
WITH CHILDBIRTH

IN THE UNITED STATES
AND CERTAIN OTHER
COUNTRIES

BY
GRACE L. MEIGS, M. D.

MISCELLANEOUS SERIES No. 6
Bureau Publication No. 19



WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

Harvard College Library
Mar. 30, 1917
From the
United States Government.

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
10 CENTS PER COPY
Δ

CONTENTS.

	Page.
Letter of transmittal	5
Summary	7
Part I. General discussion	9-27
Statistics relating to childbirth in the United States and in certain foreign countries	9-27
Introduction.....	9
Are the diseases caused by pregnancy and confinement preventable diseases?	10
Reliability of data.....	13
Number of deaths in the United States from childbirth.....	14
Death rates in the United States from childbirth.....	14
Is the death rate from childbirth falling?.....	16
Diagram 1. Death rates per 100,000 population from typhoid, diphtheria and croup, and diseases caused by pregnancy and confinement in the death-registration area of the United States, 1900 to 1913.....	18
Diagram 2. Death rates per 100,000 population from tuberculosis and pneumonia in the death-registration area of the United States, 1900 to 1913.....	19
Death rates from childbirth in urban and rural districts.....	20
Death rates from childbirth in different States.....	21
Death rates from childbirth of white and colored population.....	22
Comparison of the average death rates from childbirth in certain foreign countries and in the United States.....	22
Conclusions.....	23
Part II. Detailed analysis of methods and statistical data	29-47
Discussion of certain terms and methods used in this report.....	29-34
International Classification of Causes of Death.....	29
Death-registration area.....	31
Provisional birth-registration area	31
Methods of computing the death rates from all causes connected with pregnancy and confinement.....	31
Sources of error in the study of death rates from childbirth.....	34-43
Inaccuracy of returns.....	35
Limited area and short period of time represented by figures.....	36
Methods of computation.....	37
Sources of error in comparisons of death rates of different years.....	37
Sources of error in a study of foreign statistics.....	41
Foreign statistics.....	43-47
Comparison of the average death rates from childbirth in certain foreign countries and in the United States.....	43
Comparison of the changes in the death rates from childbirth in certain foreign countries for the years 1900 to 1913.....	44

	Page
Part III. General tables.....	49-66
Table I. Population, deaths, and death rates per 100,000 population in the death-registration area from diseases caused by pregnancy and confinement, 1890 and 1900 to 1913.....	49
Table II. Deaths and death rates per 100,000 population in the 8 States within the death-registration area in 1890 from diseases caused by pregnancy and confinement, 1890 and 1900 to 1913.....	49
Table III. Deaths and death rates per 100,000 population in the 11 States within the death-registration area in 1900 from diseases caused by pregnancy and confinement, 1900 to 1913.....	50
Table IV. Death rates per 100,000 female population in the 11 States within the death-registration area in 1900 from diseases caused by pregnancy and confinement, 1900 to 1910.....	50
Table V. Number of deaths of women from 15 to 44 years of age in the death-registration area from each cause and class of causes included in the abridged International List of Causes of Death (revision of 1909), 1913.....	51
Table VI. Population, live births, deaths, and death rates per 100,000 population and per 1,000 live births from diseases caused by pregnancy and confinement, by States and principal cities in the provisional birth-registration area, 1910.....	52
Table VII. Death rates per 100,000 population in the death-registration area from certain important causes of death, 1890 and 1900 to 1913.....	53
Table VIII. Deaths and death rates per 100,000 population in cities of at least 8,000 population and in smaller cities and rural districts in the death-registration States from diseases caused by pregnancy and confinement, 1900 to 1913.....	53
Table IX. Death rates per 100,000 population in cities that had at least 200,000 population in 1900, and were within the death-registration States of 1900, from diseases caused by pregnancy and confinement, 1900 to 1913.....	54
Table X. Death rates per 100,000 population in the 11 States within the death-registration area in 1900 from diseases caused by pregnancy and confinement, 1900 to 1913.....	54
Table XI. Deaths and death rates per 100,000 population in the death-registration area from diseases caused by pregnancy and confinement, by color of decedent, 1910 to 1913.....	56
Table XII. Average death rates per 100,000 population in certain countries from diseases caused by pregnancy and confinement, 1900 to 1910.....	56
Table XIII. Average death rates per 1,000 live births in certain foreign countries from diseases caused by pregnancy and confinement, 1900 to 1910.....	56
Table XIV. Deaths in certain countries from diseases caused by pregnancy and confinement and number and per cent of such deaths from puerperal septicemia, 1900 to 1910.....	57
Comment on sources of statistics for foreign countries.....	57
Table XV. Population, births, deaths, and death rates per 100,000 population, per 1,000 births, and per 1,000 live births from diseases caused by pregnancy and confinement in certain foreign countries for specified years.....	60
Table XVI. Average death rates per 100,000 population and per 1,000 live births from diseases caused by pregnancy and confinement in certain foreign countries for specified periods of years.....	66

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, September 25, 1916.

SIR: I transmit herewith a report entitled "Maternal Mortality from all Conditions Connected with Childbirth in the United States and Certain Other Countries," by Dr. Grace L. Meigs, in charge of the hygiene division of this bureau. This report has been prepared because the bureau's studies of infant mortality in towns and rural districts reveal a connection between maternal and infant welfare so close that it becomes plain that infancy can not be protected without the protection of maternity.

In this study Dr. Meigs undertakes to do no more than to assemble and interpret figures already published by the United States Bureau of the Census and by the statistical authorities of various foreign countries, and to state accepted scientific views as to the proper care of maternity. She points out clearly that maternal mortality is in great measure preventable, that no available figures show a decrease in the United States in recent years, and that certain other countries now exhibit more favorable rates. This report reveals an unconscious neglect due to age-long ignorance and fatalism. It is earnestly believed that whenever the public realizes the facts it will awake to action and that adequate provision for maternal and infant welfare will become an integral part of all plans for public health protection.

The generous assistance of the United States Bureau of the Census in the preparation of this report is gratefully acknowledged.

Dr. Meigs desires that special mention be made of the assistance of Miss Emma Duke, head of the statistical division of the Children's Bureau, and of Miss Viola Paradise, research assistant in the division of hygiene.

Respectfully submitted.

JULIA C. LATHROP,
Chief of Bureau.

HON. WILLIAM B. WILSON,
Secretary of Labor.

MATERNAL MORTALITY FROM ALL CONDITIONS CONNECTED WITH CHILDBIRTH.

SUMMARY.

In 1913 in this country at least 15,000 women, it is estimated, died from conditions caused by childbirth; about 7,000 of these died from childbed fever, a disease proved to be almost entirely preventable, and the remaining 8,000 from diseases now known to be to a great extent preventable or curable. Physicians and statisticians agree that these figures are a great underestimate.

In 1913 the death rate per 100,000 population from all conditions caused by childbirth was little lower than that from typhoid fever; this rate would be almost quadrupled if only the group of the population which can be affected, women of childbearing age, were considered.

In 1913 childbirth caused more deaths among women 15 to 44 years old than any disease except tuberculosis.

The death rate due to this cause is almost twice as high in the colored as in the white population.

Only 2 of a group of 15 important foreign countries show higher rates from this cause than the rate in the registration area of the United States. The rates of 3 countries, Sweden, Norway, and Italy, which are notably low, show that low rates for these diseases are attainable.

The death rates from childbirth and from childbed fever for the registration area of this country apparently are not falling to any great extent; during the 13 years from 1900 to 1913 they have shown no demonstrable decrease. These years have been marked by a revolution in the control of certain other preventable diseases, such as typhoid, diphtheria, and tuberculosis. During that time the typhoid rate has been cut in half, the rate from tuberculosis markedly reduced, and the rate from diphtheria reduced to less than one-half. During this period there has been a decrease in the death rate from childbirth per 1,000 live births in England and Wales, Ireland, Japan, New Zealand, and Switzerland.

These facts point to the need in this country and in foreign countries of higher standards of care for women at the time of childbirth.

The low standards at present existing in this country result chiefly from two causes: (1) General ignorance of the dangers connected

with childbirth and of the need for proper hygiene and skilled care in order to prevent them; (2) difficulty in the provision of adequate care due to special problems characteristic of this country. Such problems vary greatly in the city and in the rural districts. In the country inaccessibility of any skilled care is a chief factor.

Improvement will come about only through a general realization of the necessity for better care at childbirth. If women demand better care, physicians will provide it, medical colleges will furnish better training in obstetrics, and communities will realize the vital importance of community measures to insure good care for all classes of women.

PART I. GENERAL DISCUSSION.

STATISTICS RELATING TO CHILDBIRTH IN THE UNITED STATES AND IN CERTAIN FOREIGN COUNTRIES.

Introduction.

For the last two decades civilized countries have been absorbed in the problem of preventing the enormous and needless waste of human life represented by their infant death rates. The importance of this problem has been felt more keenly in the last two years in the countries now at war; in these countries the efforts toward saving the lives of babies have redoubled since the war began. Side by side with this problem, another, which is only of late finding its true place, is that of the protection of the lives and health of mothers during their pregnancy and confinement. This is a question so closely bound up with that of the prevention of infant mortality that the two can not be separated.

It is now realized that a large proportion of the deaths of babies occur in the first days and weeks of life, and that these deaths can be prevented only through proper care of the mother before and at the birth of her baby. It is also realized that breast feeding through the greater part of the first year of the baby's life is the chief protection from all diseases; and that mothers are much more likely to be able to nurse their babies successfully if they receive proper care before, at, and after childbirth. Moreover, in the progress of work for the prevention of infant mortality it has become ever clearer that all such work is useful only in so far as it helps the mother to care better for her baby. It must be plain, then, to what a degree the sickness or death of the mother lessens the chances of the baby for life and health.

This question has also another side. Each death at childbirth is a serious loss to the country. The women who die from this cause are lost at the time of their greatest usefulness to the State and to their families; and they give their lives in carrying out a function which must be regarded as the most important in the world.

Questions then of the most vital interest to the whole Nation are these: How are the lives of the mothers in this country and other countries being protected? To what degree are the diseases caused by pregnancy and childbirth preventable? If preventable, how far are they being prevented in this country? Has there been the same great decrease in the last few years in sickness and death from these causes as that which has marked the great campaigns against

other preventable diseases such as typhoid, tuberculosis, or diphtheria? How do the conditions in the United States compare with those in other countries?

In the following report the attempt has been made to derive answers to these questions from the official records of this country and of foreign countries.

Are the diseases caused by pregnancy and confinement preventable diseases?

These diseases¹ fall naturally into two groups, which differ considerably as to the degree to which they are preventable:

1. Childbed fever, or puerperal septicemia (an infection arising in connection with miscarriage or confinement), which is to a great degree a preventable disease.

2. All other diseases and complications caused by pregnancy and confinement, including conditions varying very much in the degree to which they can be prevented or cured.

Puerperal septicemia (childbed fever).—The fact is now well known that puerperal septicemia, or childbed fever, is in reality a wound infection, similar to such an infection after an accident or an operation, and that it can be prevented by the same measures of cleanliness and asepsis which are used so universally in modern surgery to prevent infection. The proof of the nature of this disease is one of the tremendous results of the scientific discoveries which were made in the latter part of the nineteenth century.

During the early part of that century childbed fever was one of the greatest hospital scourges known. It occurred also in private practice; but in hospitals where there was great opportunity for the spreading of infection the death rate from this disease was appalling. The average death rate in hospitals in all countries was 3 to 4 per cent of all women confined; sometimes it reached 10 to 20 per cent and even over 50 per cent during short periods of epidemics.² In the face of this terrific mortality many obstetrical hospitals were closed. Commissions were appointed to investigate the cause of these epidemics, and medical congresses devoted sessions to the discussion of the problem. In 1843 Oliver Wendell Holmes, and in 1847 Semmelweis, published articles stating the theory that this fever was similar to a wound infection and was due chiefly to the carrying of infectious material on the hands of attendants from one case to another. The

¹ Throughout this report when reference is made to causes of death the term "childbirth" will be used as synonymous with "all diseases caused by pregnancy and confinement"; and each of these terms will be used as being the sum of the two groups, "puerperal septicemia" and "all other diseases caused by pregnancy and confinement." It will be noted that diseases of the breast during lactation are included in the latter group. For a fuller discussion of these causes of death, and the titles of the International List of Causes of Death to which they correspond, see p. 29.

² Williams, J. W. "Obstetrics and animal experimentation." Defense of Research Pamphlet XVIII, Amer. Med. Assn., Chicago, 1911, pp. 5-19.

same ideas had been published much earlier but had not received attention.

At the time of the publications of Holmes and Semmelweiss it was not known that the infection of wounds is caused by the action of bacteria or germs. This discovery followed the pioneer discovery of living bacteria causing fermentation, made by Pasteur about 1863, which has revolutionized all surgery and preventive medicine.

In 1867 Lister began to apply to surgery the work of Pasteur; he taught that wound infection at operation could be prevented by the destruction of bacteria through disinfection or antiseptics. Though these methods have been supplemented in later years by the better methods of absolute surgical cleanliness or asepsis, they represented at that time a great advance.

About 1875 Lister's methods began to be generally accepted and applied in hospitals to the prevention of infection at childbirth. This movement gained great support in 1879 when Pasteur proved definitely that childbed fever is caused by bacteria.

Gradually the methods of antiseptics or disinfection and later the better methods of asepsis were accepted in obstetrical hospitals; and at the same time the mortality, once so high, dropped enormously. At present the death rate from puerperal septicemia among cases delivered in hospitals is extremely low. Williams says: "At the present time it is safe to say that in well-regulated hospitals the mortality from puerperal infection is less than 0.25 per cent. This is in great contrast with the average mortality of 3 to 4 per cent observed [in hospitals] throughout the world prior to the introduction of antiseptic methods, and means that only 1 woman now dies as compared with 15 or 20 formerly."¹

This experience in hospitals has proved definitely that puerperal septicemia is to a very large degree preventable. One fact, however, complicates the whole question and makes it impossible to say that the disease is in all cases absolutely preventable, namely, that a very small number of cases develops even under conditions of the best hospital or private care, when every method for avoiding infection has been used. This fact has led to much controversy. In general obstetricians of the greatest experience believe that a small number of cases of infection after childbirth may develop from bacteria which were already in the body of the patient before confinement; but that in the main such cases are of mild severity and that only a few fatal cases are due to this cause. Another point which must be borne in mind is that, in a certain number of cases, women may infect themselves through improper hygiene during pregnancy or just before or at confinement. Therefore the teaching of proper hygiene is an essential part of the work for the prevention of infection.

¹ Williams, J. W. *Supra cit.*, p. 19.

To sum up, experience has shown that by far the major part of all serious cases of infection at childbirth may be prevented by the application of such principles of hygiene and of strict surgical cleanliness as are now established beyond question.

All other diseases caused by pregnancy and confinement.—The diseases and complications included under this heading are those given on page 30 as being included under "Other puerperal accidents of pregnancy and labor."

A definite statement such as that made above regarding the preventability of puerperal septicemia can not be made about this second group of diseases, which includes many different conditions. However, it is a fact well proved in practice that a large number of these complications can be prevented through proper hygiene and supervision during pregnancy and through skilled care at labor. Certain other complications which can not be prevented can be detected before serious harm is done, and treatment can be given which will save the mother's life. We can see this more clearly if we consider as examples two of the most important complications.

Puerperal albuminuria and convulsions, called also eclampsia, or toxemia of pregnancy, is a disease which occurs most frequently during pregnancy but may occur at or following confinement. It is a relatively frequent complication among women bearing their first children. When fully established its chief symptoms are convulsions and unconsciousness. In the early stages of the disease the symptoms are slight puffiness of the face, hands, and feet; headache; albumen in the urine; and usually a rise in blood pressure. Very often proper treatment and diet at the beginning of such early symptoms may prevent the development of the disease; but in many cases where the disease is well established before the physician is consulted, the woman and baby can not be saved by any treatment. In the prevention of deaths from this cause it is essential, therefore, that each woman, especially each woman bearing her first child, should know what she can do, by proper hygiene and diet, to prevent the disease; that she should know the meaning of these early symptoms if they arise, so that she may seek at once the advice of her doctor; and that she should have regular supervision during pregnancy, with examination of the urine at intervals.

Some obstruction to labor in the small size or abnormal shape of the pelvic canal causes many deaths of mothers included in the class "other accidents of labor" and also many stillbirths. If such difficulty is discovered before labor, proper treatment will in almost all cases insure the life of mother and child; if it is not discovered until labor has begun, or perhaps until it has continued for many hours, the danger to both is greatly increased. Every woman, therefore, should have during pregnancy—and above all during her first preg-

nancy—an examination in which measurements are made to enable the physician to judge whether or not there will be any obstruction to labor. A case in which a complication of this kind is found requires the greatest skill and experience in treatment,¹ but with such treatment the life and health of the mother are almost always safe.

These two examples will suffice. In the same way it could be shown, with regard to all the other complications of pregnancy and labor, that those which can not be prevented can be treated successfully in most cases if detected in time.

It can be regarded, then, as a generally accepted fact that all illness and death connected with childbearing is, to a certain and large degree, preventable, through the application of the scientific knowledge which is now well established. The next questions are, How far are these diseases being prevented in the United States? How many deaths do they cause each year? What are the death rates from these causes, and are they decreasing or increasing? The statistics gathered by the United States Bureau of the Census have been studied for answers to these questions.

There are other equally important questions to which these figures will not give answers. In addition to the number of deaths and death rates, it is important to know how much illness is caused by the diseases of pregnancy and confinement. How many women do they disable for months or years? Undoubtedly the health of these mothers affects enormously the welfare of their children. Unfortunately such questions can not be answered; puerperal septicemia is not a reportable disease in this country as it is in many others. We can only remember that for each woman who died there are surely many who were ill for days, weeks, or months, but who finally recovered.

The following pages give a brief summary of the data, published by the United States Bureau of the Census, dealing with deaths from childbirth. These are discussed in further detail in other sections of the report.

Reliability of data.

The statement is frequently made that all statistics on this subject are incomplete. This is undoubtedly true with regard to the figures available in each country. A detailed discussion of the many sources of error in the statistics of the United States and of foreign countries on this subject will be found in another section, beginning on page 34.

¹ The public must be taught that the conduct of labor complicated by a moderate degree of pelvic contraction is quite as serious as a case of appendicitis, and that its proper management requires the highest degree of judgment and skill, while eclampsia or placenta previa are even more serious.—Williams, J. W. "The midwife problem and medical education in the United States." *Trans. Amer. Assn. for Study and Prevention of Infant Mortality*, 1911, p. 189.

From that discussion several conclusions may be drawn:-

1. Though the figures of the number of deaths from puerperal septicemia and from all other diseases connected with childbirth are certainly incomplete, yet they are reliable as far as they go; they may be accepted as a statement of the minimum number of deaths which have actually occurred as a result of these diseases.

2. All conclusions as to comparative death rates in various years and in various countries can be made only with caution and by bearing in mind the many statistical pitfalls connected with such comparisons.

With a full understanding of the limitations of the figures available, it has seemed worth while to publish the following figures of the deaths in the United States due to childbirth.

Number of deaths in the United States from childbirth.

In 1913 in the "death-registration area"¹ of the United States 10,010 deaths were reported as due to conditions caused by pregnancy and childbirth. Of these deaths, 4,542 were reported as caused by puerperal septicemia or childbed fever.

Using the death-registration area as a basis, we are justified in estimating that in 1913 in the whole United States 15,376 deaths were due to childbirth, and 6,977 of these were due to childbed fever. As will be shown later, these figures are without doubt a gross underestimate. As it is, they are striking enough—almost 7,000 deaths in one year in this country due to childbed fever, a disease to a large degree easily preventable; and over 8,000 due to the other diseases caused by pregnancy and confinement, most of which are preventable or curable by means well known to science.

Death rates in the United States from childbirth.

The death rate from all diseases caused by pregnancy and confinement in 1913 in the registration area was 15.8 per 100,000 population (which includes all ages and both sexes). The death rate from puerperal septicemia was 7.2.

These figures, however, mean little to us unless we compare them with the death rates from other preventable diseases. In the same year and area the typhoid rate was 17.9 per 100,000 population; the rate from diphtheria and croup 18.8. The highest death rate from any one disease was that from tuberculosis, 147.6 per 100,000 population. Any such comparison with the rates from diseases to which both sexes and all ages are liable is of course very misleading; but in spite of that fact it is interesting to note that typhoid fever, the disease

¹ The death-registration area comprises the States and cities in which the registration of deaths is returned as fairly complete.—U. S. Census. Mortality Statistics, 1911, p. 9. It is estimated that in 1913 the death-registration area included 65.1 per cent of the population of the United States. (See Table I, p. 40.)

against which so great an amount of effort is now directed, has a rate at present but 2 per 100,000 population higher than that from the diseases caused by pregnancy and confinement.

Death rates per 100,000 women.—The death rates from childbirth are approximately doubled when worked on the basis of 100,000 women. This will be seen when Tables IV and III (p. 50) are compared. The former gives for the period 1900 to 1910, the annual death rates per 100,000 women in the group of 11 States which were in the death-registration area in 1900, the latter the death rates per 100,000 population in the same group of States for the same period. It is evident that the rates in Table IV for each year are slightly more than twice those in Table III for the same year.

Death rates per 100,000 women of childbearing age.—Again, a much higher but a more accurate death rate from these diseases is found when the basis taken is the group which alone is affected by these diseases—women of childbearing age. When the rate is based not upon 100,000 population of both sexes and all ages but upon 100,000 women 15 to 44 years of age, the rate as ordinarily given is multiplied several times.

In 1900,¹ the only year for which the rates can be computed, the death rate in the registration area per 100,000 women 15 to 44 years of age from all diseases of pregnancy and confinement was 50.3; from puerperal infection, 21.6. (See p. 32.) The corresponding rates for the same year per 100,000 population were 13.1 and 5.6. In this year, therefore, the rates are almost quadrupled when based on that group of the population which alone can be affected by these diseases.

Moreover, the death rates as ordinarily given per 100,000 population conceal the fact that the diseases of pregnancy and childbirth are indeed among the most important causes of death of women between 15 and 44 years of age; the actual number of deaths shows this to be the case. In 1913 in the registration area these diseases caused more deaths than any other one cause of death except tuberculosis. In that year there were, among women 15 to 44 years of age, 26,265 deaths from tuberculosis; 9,876 deaths from the diseases of pregnancy and confinement; 6,386 from heart disease; 5,741 from acute nephritis and Bright's disease; 5,065 from cancer; and 4,167 from pneumonia. Other diseases, such as typhoid, appendicitis, and the infectious diseases show far fewer deaths. (See Table V, p. 51.)

Death rates per 1,000 live births.—This rate, as will be shown repeatedly throughout the report (see p. 32), gives a far clearer picture of the actual risk of childbirth than do any of the rates so far considered. This rate can be given only for one year, 1910, and only for the provisional birth-registration area for that year. The rate from all diseases caused by pregnancy and confinement is 6.5, from puer-

¹ Census year ending May 31.

peral septicemia, 2.9, and from all other diseases of pregnancy and confinement, 3.6 per 1,000 live births. That is, in this area for every 154 babies born alive one mother lost her life. (See Table VI, p. 52.)

Is the death rate from childbirth falling?

Has there been in the last few years any decrease in the death rates from puerperal septicemia and from other diseases caused by pregnancy and confinement? The general opinion of the medical profession and of the laity is that these death rates, and especially the rate from puerperal septicemia, are fast decreasing. The fact that hospital epidemics of puerperal septicemia are now things of the past is thought to be evidence that deaths from this disease are now rare. On the other hand, many obstetricians of wide experience believe that outside of hospitals there has been no great decrease in the death rate from puerperal septicemia.

Dr. Williams,¹ professor of obstetrics, Johns Hopkins University, believes that there has been no great improvement in this country; Dr. Webster,² professor of obstetrics, Rush Medical College, University of Chicago, and Dr. Powell³ hold the same opinion; Dr. De Lee,⁴ professor

¹ In private practice it is doubtful whether the results are materially better to-day than they were before the introduction of antiseptic methods, for the reason that the doctrines of asepsis have not yet permeated the rank and file of medical men, much less of midwives, to whose care is committed a very large proportion of obstetrical cases. Though, at the same time, it must be admitted that we rarely hear of outbreaks of puerperal infection such as are mentioned in the historical work of Hirsch, who gives the particulars of 216 epidemics occurring between the years 1652 and 1862.

Boehr stated in 1875 that 363,324 women had died from puerperal infection in Prussia during the preceding 60 years, and calculated that every thirtieth married woman eventually perished from it; while Ehlers contended that outside of the well-regulated hospitals the results were equally bad in 1900. Furthermore, Frommstedt, in 1910, that at least 5,000 women succumb each year in Prussia to this preventable malady.

Bacon, in an article based upon the records of the health department of Chicago, showed that for the 40 years prior to 1896 puerperal infection was assigned as the cause of death in 12.75 per cent of the women dying between the ages of 20 and 50 years, varying between 20 per cent in 1873 and 7.3 per cent in 1895. Similar results were reported by Ingerslev, who stated that, even at the present time in Denmark, with the single exception of tuberculosis, puerperal infection is the most frequent cause of death in women during the childbearing period.

The investigations of Boxall, Byers, and Lea show a similar condition in England, where it may be said that outside of the lying-in hospitals this preventable scourge claims as many and perhaps more victims than it did 20 or even 40 years ago.

Moreover, in trying to determine the frequency of puerperal infection, one can not be guided altogether by the mortality statistics, inasmuch as the largest proportion of these cases do not end fatally. On the other hand, anyone who deals much with gynecological patients can not fail to be impressed with the very large proportion whose troubles have originated from febrile affections during the puerperium, which in many instances were clearly due to the neglect of aseptic precautions on the part of the obstetrician or midwife.—Williams, J. W. *Obstetrics*, 1913, pp. 900, 901.

² It is the general impression that there has been a marked diminution in the mortality of puerperal sepsis since the introduction of antiseptics. This is probably true only as regards hospital practice. * * * As regards private practice, it is doubtful if there has been much diminution in mortality, either in Europe or America.—Webster, J. C. *A Text-book of Obstetrics*, 1903, p. 640.

³ I am quite sure it is the belief of all who have given attention to this subject, that the mortality from puerperal infection has been diminished little if any in private practice.—Powell, H. H. "Mortality from puerperal infection," *Surgery, Gynecology and Obstetrics*, 1906, Vol. III, p. 11.

⁴ I do not fear to hazard the statement that 8,000 women die annually in the United States from child-bed infections. When one considers that the majority of cases of puerperal infection get well, the conclusion is inevitable that the disease is still—in these modern aseptic and antiseptic times—very prevalent.—De Lee, J. B. *Principles and Practice of Obstetrics*, 1912, p. 870.

of obstetrics, Northwestern University, comments on the great prevalence of puerperal septicemia in spite of our present knowledge of asepsis. Dr. Moran¹ points out the lack of decrease in the figures as given in the census reports, as does also Dr. Davis² in a recent volume. Dr. Edgar,³ professor of obstetrics and clinical midwifery, Cornell University Medical College, on the other hand, believes that there has been a decrease.

We need a definite answer to this question, based on a study of unassailable statistics. Unfortunately the available figures on this subject for this country and foreign countries have many possibilities of error, as will be shown in a later section (see p. 34). The errors have been avoided as far as possible; those which can not be avoided must be considered in reading the following summary. Especially to be remembered is the fact that in recent years great improvement has been made in the registration of deaths from childbirth and childbed fever.

According to the evidence available, these death rates are apparently not decreasing. During the 23 years ending in 1913 in this country no definite decrease in the death rate from the diseases caused by pregnancy and confinement can be demonstrated; nor can any decrease in the death rate from puerperal septicemia be shown.

In the registration area as a whole the death rates have shown no decline in the years between 1890 and 1913. The death rate from all diseases caused by pregnancy and confinement, which was 15.3 in 1890, fell to 13 in 1902, and then with annual fluctuations rose to 16 in 1911; in 1913 the rate was 15.8. The annual average for the period 1901 to 1905 was 14.2; for the period 1906 to 1910, 15.5. (See Table I, p. 49.)

The death rate from all diseases caused by pregnancy and confinement for the group of eight States which have been included in the death-registration area from 1890 to 1913⁴ also has shown no decrease during the course of these 23 years. There was a slight fall in the rate for the year 1900 as compared with that for the year 1890, followed by a slight rise. (See Table II, p. 49.) In 1890 the rate was 14.1 per 100,000 population; in 1900, 12.6; in 1913 it was 14.3.

The death rates for a second group of States⁴ (those included in the death-registration area since 1900) show between 1900 and 1913 a

¹ Moran, J. F. "The endowment of motherhood," Jour. Amer. Med. Assn., 1915, Vol. LXIV, p. 122.

² It is probable that very few physicians realize that with the great progress of preventive medicine and aseptic surgery that there has not been a similar increase in the safety of maternity.—Davis, C. H. *Painless Childbirth, Eutocia, and Nitrous Oxid-Oxygen Analgesia*, 1916, p. 62.

³ It is very difficult to estimate the frequency of puerperal infection outside of hospitals * * * but it is undoubtedly much less than it used to be.—Edgar, J. C. *The Practice of Obstetrics*, 1903, p. 752.

⁴ Selected for study because good methods of death registration may be assumed to have become established, and also because comparisons of the rates of such a group of States are not open to the error due to the changing character of the registration area.

slight increase, from 12.9 to 14.9, with the high point 15.5 in 1911. (See Table III, p. 50). These rates are more fully discussed on page 38.

The death rates from puerperal septicemia or childbed fever during these years in each group of States have run parallel with those from the whole group of diseases connected with childbirth; they, too, have shown practically no change in 13 years.

It is probable that the improvement in reporting deaths from childbirth may account for the apparent rise in the rates since 1900; it may also perhaps conceal a slight improvement in actual conditions since that time; but it is safe to say that any marked decrease in the actual death rate from childbirth during the last 13 years could not have been masked by this error.

In these years what has been the change in the death rates from other preventable diseases? These death rates tell a very different story from that of the rates from childbirth. They give a bare outline of the remarkable achievements of modern medicine in the prevention of certain diseases.

DIAGRAM I.—DEATH RATES PER 100,000 POPULATION FROM TYPHOID, DIPHTHERIA AND CROUP, AND DISEASES CAUSED BY PREGNANCY AND CONFINEMENT IN THE DEATH-REGISTRATION AREA OF THE UNITED STATES, 1900 TO 1913.

RATE.

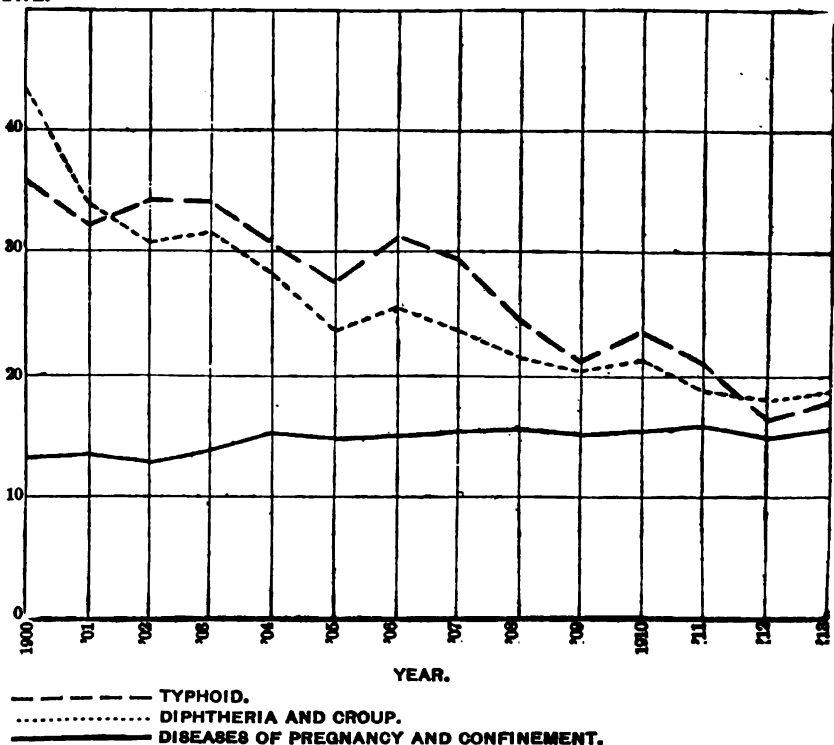
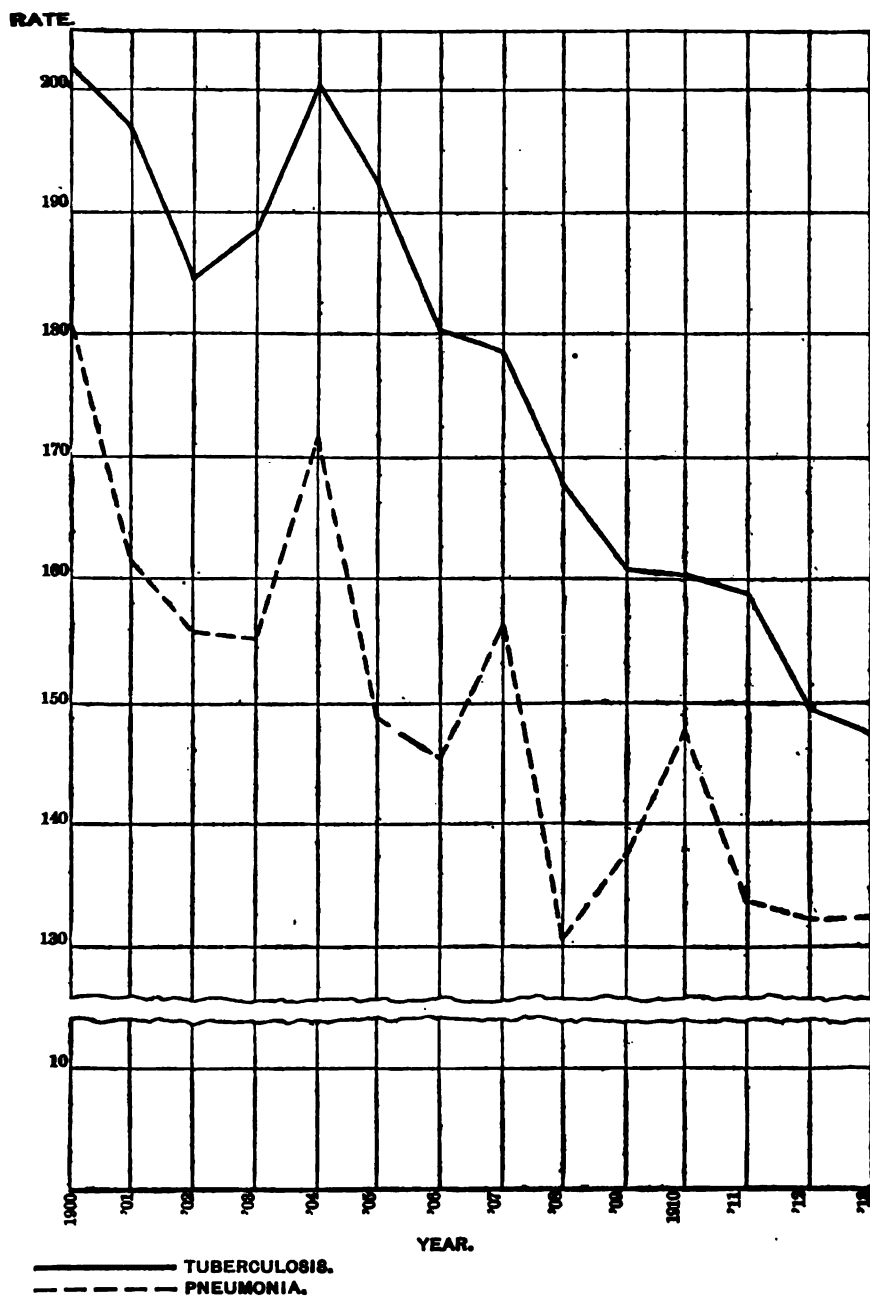


DIAGRAM 2.—DEATH RATES PER 100,000 POPULATION FROM TUBERCULOSIS AND PNEUMONIA IN THE DEATH-REGISTRATION AREA OF THE UNITED STATES, 1900 TO 1913.



Between 1890 and 1913 the death rate from typhoid fever in the death-registration area fell from 46.3 to 17.9; that from diphtheria and croup from 97.8 to 18.8; from tuberculosis from 252 to 147.6; from pneumonia from 186.9 to 132.4; from diarrhea and enteritis under 2 years from 139.1 to 75.2. (See Table VII, p. 53.)

If we consider only the 13 years since 1900, for which we have annual reports, the changes are just as startling. In that time the death rate from typhoid fever has been cut in half; that from diphtheria and croup has dropped to less than half; those from tuberculosis and pneumonia have both shown a marked fall. These changes, together with the lack of change in the death rates from the diseases caused by pregnancy and childbirth, are shown graphically in diagrams 1 and 2.

Death rates from childbirth in urban and rural districts.

Besides the questions applying to the death rates of the country as a whole, there are further questions which it would be interesting to answer from the data given by official figures. Is the rate higher in the cities than in rural districts? Does a comparison of the rates of different sections of the country reveal any significant facts? Is there any difference in rate among different groups of the population?

No figures,¹ unfortunately, are available for the death rates from these diseases in what is generally understood as the rural portion of this country; that is, among the population scattered in districts outside of even the smallest towns and cities. In view of the fact that standards of obstetrical and prenatal care differ so widely in these rural districts from those in large cities a comparison of the rates would have been extremely significant.

The death rates for the group of cities of 8,000² or more inhabitants in the registration States³ have been studied, as contrasted with the death rates of the smaller cities, towns, and rural districts classed together. The rates in each year are higher for the larger cities of the registration States than for the smaller cities and rural districts. (See Table VIII, p. 53.) Part of this difference may be due to greater incompleteness of the returns from the second group. Further than this, many factors may be involved in the higher rate in the larger

¹ In the publications of the Bureau of the Census on Mortality Statistics figures are given for the population classified into urban and rural or of cities and rural districts. For the years 1900 to 1909 urban is defined as including the population of all cities of 8,000 or more inhabitants at the census of 1900; rural as including that of all cities and towns of less than 8,000 inhabitants, as well as of the districts outside of any cities, towns, or villages. For the years 1910 to 1913 the division is made between cities having a population of 10,000 or more in 1910 and those cities having less than 10,000 inhabitants, together with rural districts.

² Ten thousand inhabitants, 1910 to 1913.

³ It has been thought better to compare the urban and rural rates in the group of registration States in each year rather than to compare these rates for the whole registration area as constituted in each year. As the registration area includes cities in several States of which the smaller towns and rural districts are not included, the latter comparison would seem to be scarcely fair.

cities. While some of the larger cities afford better provision for obstetrical and prenatal care than do the smaller cities and rural districts, this is not true of all; moreover, the larger cities probably show a much higher rate among the less favored than among the more favored groups of their inhabitants. Overcrowding, overwork, low incomes, ignorance of the need for good obstetrical care and how it can be obtained may all play their part in producing this high rate in the larger cities.

The figures do not show a decrease in the death rates from childbirth in the larger cities in recent years. The death rates of the whole group of cities of 8,000¹ or more inhabitants in the registration States for the years 1900 to 1913 (see Table VIII, p. 53) show no decline. The rate in 1900 was 14.9; in 1913, 17.2.

The rates from childbirth for the same period in a group of 7 large cities have been studied. (See Table IX, p. 54.)

The rates for New York City alone show a definite and steady decline; in 1905 the rate per 100,000 inhabitants was 20.3; in 1913, 14.1.

The rates of Boston, Buffalo, Detroit, Jersey City, and Washington show wide annual fluctuations, but no general tendency to increase or decrease. The rate of Newark, on the other hand, shows an increase.

Death rates from childbirth in different States.

The death rates of only 11 States (including the District of Columbia) can be studied through a period of time (1900 to 1913) long enough to justify any conclusions. These States, unfortunately, do not represent any widely different sections of the country, as they include only the New England States, two Middle Atlantic States (New York and New Jersey), the District of Columbia, and two North Central States (Indiana and Michigan). The western and southern sections of the country are unrepresented.

Though the rates for each State vary considerably from year to year, it will be noted that certain States show high average rates; among these are the District of Columbia, Michigan, and Rhode Island, whose rates are 17.6, 17.1, and 16.8, respectively. (See Table X, p. 54.) Other States show comparatively low average rates; for example, New Hampshire (11.2) and Maine (11.8). It seems premature at this time to draw any conclusions as to the cause of these differences in rates in different States. When the rates are available for all sections of the country, a comparison of rates for different large sections presenting similar problems will be very useful.

¹ Ten thousand inhabitants, 1910 to 1913.

Death rates from childbirth of white and colored population.

No facts brought out in this study are as striking as the difference in rates from childbirth of the white and colored population of the death-registration area. In some cases the rates for the colored population are almost double those for the white. Table XI, page 56, which gives the rates so divided, demonstrates this difference. In 1913 the death rate from all diseases caused by pregnancy and confinement was 15.2 per 100,000 white population and 26.1 per 100,000 colored. In the same year the rate from puerperal septicemia was 6.9 for the white population and 11.5 for the colored. A similar relation is shown by the rates for each year from 1910 to 1913. Although the rates can be given only for four years, and are based on small figures, yet they show differences so marked that they picture without doubt a very great difference in standards of care at childbirth in these two groups. When all the Southern States are included in the death-registration area the magnitude of this problem undoubtedly will be shown by the death rates from childbirth in these States. At present but a small percentage of the colored population of the United States is represented by the figures available.

Comparison of the average death rates from childbirth in certain foreign countries and in the United States.

Are the death rates from these diseases in the death-registration area of the United States higher or lower than those in other civilized countries? Have these rates in other countries been falling or rising in the last 13 years, while the rates of this country have been apparently stationary? These questions, like all those of comparative international statistics, are of immense interest, but they involve many difficulties and sources of error. These are discussed on page 41. They should be considered in reading the following summary.

In order to make possible a comparison of the death rates from these causes for 15 foreign countries with those for the United States, an average rate has been computed for the years 1900 to 1910¹ for each of the countries, using the same method as that in use in the United States. When the 16 countries studied are arranged in order, with the one having the lowest rate first, the death-registration area of the United States stands fourteenth on the list. (See Table XII, p. 56.) Only two countries, Switzerland and Spain, have higher rates; many of the countries, however, show rates differing but little from that of the United States. Markedly low rates are those of Sweden (6), Norway (7.8), and Italy (8.9); a strikingly high rate is that of Spain (19.6).

The death rate from childbirth per 1,000 live births is not available for the death-registration area of the United States, but can be given

¹ Or for that portion of this period for which figures are available.

only for the small number of States and cities included in the provisional birth-registration area and for one year, 1910. (See p. 31.) This rate, 6.5, is considerably higher than that for 1910 of any of the countries studied. When the average rates for a number of years of the 15 countries are reckoned per 1,000 live births and arranged in order, it will be seen that the same group of countries—Sweden, Italy, and Norway—shows the lowest rates. (See Table XIII, p. 56.) Spain in this table shows the rate which is next to the highest, while Belgium now has the highest rate. For a comparative study of the rates of these countries the rates per 1,000 live births give undoubtedly the clearest picture of the actual conditions.

These rates show a wide variation. While in Sweden but one mother is lost for every 430 babies born alive, in Belgium one mother dies for every 172 babies, and in Spain one for every 175 babies born alive. The rates in Belgium and Spain are two and a half times as high as the rate in Sweden.

Far more significant than a comparison of actual death rates of various countries is a comparison of the changes which have occurred in these death rates in each country in recent years. England and Wales, Ireland, Japan, New Zealand, and Switzerland have shown a decrease in the death rate per 1,000 live births from all diseases caused by pregnancy and confinement; but, in this group, only in England and Wales and in Ireland has the death rate from puerperal septicemia decreased; in the other three countries this rate has remained practically the same, though the total rate has decreased.

In Australia, Belgium, Hungary, Italy, Norway, Prussia, Spain, and Sweden both the rate from childbirth and that from puerperal septicemia remained almost stationary during the periods studied.

The total rate for Scotland shows a definite increase, though the rate from puerperal septicemia has decreased. (See Table XVI, p. 66.)

Conclusions.

In the foregoing pages the attempt has been made to draw, from available statistics, answers to certain important and urgent questions relating to the hazards of childbirth in this country and in other countries. It has been shown that a large number of women die year after year in this country from childbed fever, a disease proved over 40 years ago to be almost entirely preventable; and that a still larger number die from other conditions connected with childbirth which are known to be to a large degree preventable or curable. The proportionately small number of women lost from these causes in certain foreign countries demonstrates the needlessness of the greater part of our losses. There is no evidence, moreover, of any great advance made during the last 13 years in this country in the prevention of disease and death due to childbirth, though the

same period has been marked by a notable decrease in the death rates of certain other diseases which have been proved preventable.

What is the cause of these conditions in this country? At the root of the matter, apparently, lie two chief causes: First, general ignorance of the dangers connected with childbirth and the need of skilled care and proper hygiene in order to prevent them; second, such difficulties related to the provision of proper obstetrical care as are characteristic of conditions in this country.

A general realization of certain of the fundamental facts related to the bearing of children has only begun; this function has always been looked upon with a mixture of ignorance and fatalism. The hazards to health and life connected with childbirth have been either ignored or accepted as unavoidable accidents. By most people childbirth is regarded as an entirely normal process, and, happily, in the great majority of cases this is true. But the figures given in this report show that it is not true of all. Each year there is a vast number of normal deliveries, and among them the relatively small but absolutely very large number of complicated cases is lost sight of. On the other hand, most people regard such illness and deaths as do occur as unpreventable. Only very gradually and incompletely are women beginning to realize the simple facts that certain accidents and complications occur in a definite percentage of cases of childbirth, but that almost always these may be avoided or cured if women exercise the proper hygiene during pregnancy, secure proper supervision during that time, and have skilled attendance at labor. Like other essentials of hygiene and preventive medicine these principles are at last becoming public property instead of being the exclusive possession of physicians. But in this case progress has been very slow. Knowledge of the need for good care at childbirth is essential; the lack of such knowledge and of a demand for this care has been, probably, the chief factor in producing the present indifference to this phase of preventive medicine.

The husbands of women bearing children do not realize that money paid for skilled service at childbirth is one of the most necessary family expenditures; hence, obstetrics has become one of the worst paid though one of the most taxing branches of medicine. Dr. Williams¹ speaks of the small fees usually paid for maternity care and says that "doctors who are obliged to live from their practice can not reasonably be expected to give much better service than they are paid for." Naturally enough, the lack of interest of physicians in obstetrics is partly due to this fact. No doubt another reason why many able physicians dislike this branch of practice is the fact that they feel strongly the responsibility assumed in the care of

¹ Williams, J. W. "The midwife problem and medical education in the United States." *Trans. Amer. Assn. for Study and Prevention of Infant Mortality*, 1911, p. 190.

women at childbirth; yet they are frequently called upon to take this responsibility in the face of conditions which they can not control and which threaten the safety of their patients. A conscientious physician does not willingly undertake the conduct of a difficult case of labor outside a hospital and without skilled assistance; but frequently he must do so, either because there is no hospital or trained nurse available, or because the patient and her family are unable or unwilling to pay for the needed help. The physician either must give up the case to an attendant who is less skillful and careful than himself or must take the risk that puerperal septicemia or some other complication may occur. If either follows he has the blame. Altogether a physician has little incentive to specialize and acquire great skill in this branch.

Necessarily the same apparent indifference to the importance of obstetrics is reflected in the courses of many medical colleges. Dr. Williams¹ pointed out in 1911 that in the majority of medical colleges in the United States instruction in this subject was grossly neglected; that graduates from these colleges beginning their practice were totally unprepared to manage any but absolutely normal cases of confinement, and that they were untrained in the practice of the principles of asepsis as applied to this branch. Other papers and discussions in the Transactions of the American Association for Study and Prevention of Infant Mortality have emphasized the same facts. In the five years since the article of Williams was written some improvement in these conditions has undoubtedly taken place, as would be expected in connection with the present remarkable tendency toward the raising of standards of medical education in the United States. However, there is no question that further improvement is greatly needed.

Communities are still to a great extent indifferent to or ignorant of the number of lives of women lost yearly from childbirth; many communities which are proud of their low typhoid or diphtheria rates ignore their high rates from childbed fever. Communities are only beginning to realize that among their chief concerns is the protection of the babies born within their limits, and necessarily also of the mothers of those babies before and at confinement.

The second fundamental cause of the high death rates from childbirth in this country previously spoken of—that is, the difficulty of obtaining adequate care—is seen to depend to a large extent on the first, the general ignorance of need for good care. As women, their husbands, physicians, and communities realize the absolute need of skilled care for the prevention of needless deaths from childbirth, methods for providing such care will be developed. In this development special problems will have to be solved in each type of commu-

¹ Williams, J. W. *Supra cit.*, p. 182.

nity, and in each section of the country—North, South, East, and West. These problems are different from those of foreign countries. While the methods being employed in such countries for reducing the maternal death rate may be suggestive, special methods adapted to the conditions in this country will probably have to be worked out. Of the greatest value, however, as examples, are pieces of work such as that now being carried on in England and other European countries for maternal and infant welfare, that of the New Zealand Society for the Health of Women and Children, the work of the Victorian Order of Nurses of Canada, and of the mayor of the little French town of Villiers-le-duc.¹

Certain typical problems, characteristic of especial types of communities in this country, may be outlined briefly. In many of the larger cities excellent prenatal and obstetrical care can be obtained by those who can pay considerable sums for it and who realize its importance sufficiently to be willing to do so. In many cities, also, much progress has been made in the provision, through obstetrical clinics and hospitals, of good prenatal and obstetrical care, free or at low cost, for those who otherwise could not afford it. Yet even in a city well supplied with such clinics the number of women reached is relatively small in comparison with the total number of women who bear their children without adequate care during pregnancy and labor. In many large cities, especially those with a large percentage of foreign or of colored population, the untrained midwife is a much-discussed problem. It is well known, moreover, that women of moderate means, who represent a very large proportion of women bearing children, have, in most modern cities, received least benefit from improvements in standards of prenatal and obstetrical care. In working out plans for decreasing the death rate from childbirth in large cities the interests of this group can not be ignored. The problem must be considered as one which must be solved for all classes in a community; it must be realized that it is a problem of the greatest importance to the community as a whole. A very hopeful tendency is the one shown already in some cities, to look upon such service not as a charity but as a concern of the municipality as truly as the protection of its homes from fire and burglary or its milk and water supply from contamination.

In rural districts the problems are essentially different. In many such districts, especially in the North and West, where pioneer conditions still prevail, the question is not one of good or bad obstetrical care but of the inaccessibility of any care at all at this time. Many women bear their children with no attendant other than the hus-

¹ Rapport sur un Arrêté Municipal pris par M. Morel de Villiers. Bulletin de l'Académie de Médecine. 1904. 3^e série, Vol. LI, p. 222. Moore, S. G. "The Milroy lectures on infantile mortality and the relative practical value of measures directed to its prevention." Lecture III, Lancet, 1915. Vol. CXC, p. 943.

band, a relative, or a neighbor. The nearest physician may be many miles away, the nearest hospital much farther. The expense of calling a physician must necessarily be great, and usually is not considered justifiable. These women have of course no care during pregnancy; if complications develop they are unforeseen, and help is not available. As help in household tasks is usually unprocurable, many women must take up their work much sooner than they should. It may be urged that in practice it would be quite impossible for women living under rural conditions to be provided with such skilled supervision during pregnancy and such care at and after confinement as are now considered ideal. It certainly is not true, however, that a feasible community plan could not be worked out, if the interest of the community demanded it. Such a plan would necessarily recognize two main problems: (1) The best practical care of normal cases and (2) the detection of abnormal cases and their care.

A unit plan for a rural county would perhaps include:

1. A rural nursing service, centering at the county seat, with nurses especially equipped to discern the danger signs of pregnancy. The establishment of such a service would undoubtedly be the most economical first step in creating the network of agencies which will assure proper care for both normal and abnormal cases. In the rural counties in the United States which already have established nurses, the growth of this work will be watched with the greatest interest.

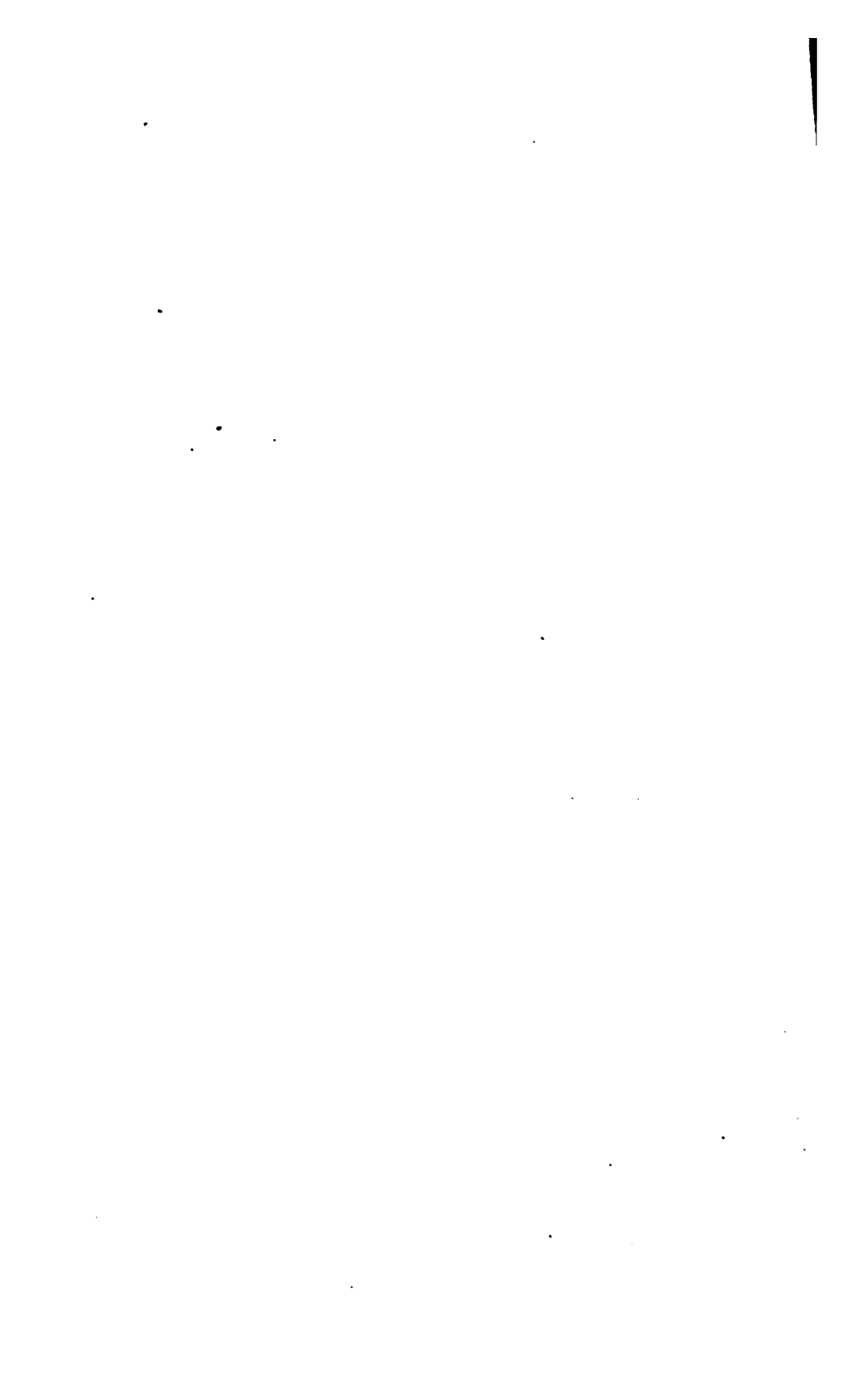
2. An accessible county center for maternal and infant welfare at which mothers may obtain simple information as to the proper care of themselves during pregnancy as well as of their babies.

3. A county maternity hospital, or beds in a general hospital, for the proper care of abnormal cases and for the care of normal cases when it is convenient for the women to leave their homes for confinement. Such a hospital necessarily would be accessible to all parts of the county.

4. Skilled attendance at confinement obtainable by each woman in the county.

As examples have been chosen the special problems in large cities and in pioneer rural districts. Other types of communities in this country present some of the same problems or others just as urgent. In each community, large or small, the essential problem is the same—how to bring about a general realization of the need for adequate care for each woman at childbirth, and how to secure such care.

This report attempts to open for lay discussion and medical study the subject of the preventable loss of life caused by childbirth in this country. Greater interest in the subject surely will lead to the development of new and successful methods for the prevention of these needless deaths.



PART II. DETAILED ANALYSIS OF METHODS AND STATISTICAL DATA.¹

DISCUSSION OF CERTAIN TERMS AND METHODS USED IN THIS REPORT.

International Classification of Causes of Death.

Official mortality statistics are derived from the returns of the causes of the deaths which occur annually. Such a return is made on the death certificate by the attending physician or by some person assumed to be familiar with the facts as regards the cause of death. Before the establishment in 1900 of the International Classification of Diseases and Causes of Death many different methods were used in different countries for the classification of these causes as returned on the certificates. The resultant confusion made difficult or impossible the comparison of the mortality statistics of various countries and led to the proposal of this uniform method of classification, called the "International Classification." Various countries have adopted this system of classification at various times; the United States Bureau of the Census adopted it for use in the calendar year 1900; Great Britain for use in 1911. It is planned to keep this classification up to date through revisions at 10-year intervals. The second revision was made in 1909, and a considerable number of changes were made. Differences in classification between the International List of Causes of Death and the lists in use in countries where the International has not been adopted and between the different revisions of the International List are extremely important, as will be shown, in any comparison of the death rates of various countries and of the same country for a series of years.²

In the detailed International List of Causes of Death, second decennial revision, Paris, 1909, the heading "VII—The Puerperal State" includes: (134) Accidents of pregnancy; (135) Puerperal hæmorrhage; (136) Other accidents of labor; (137) Puerperal septichæmia; (138) Puerperal albuminuria and convulsions; (139) Phlegmasia alba dolens, embolus, sudden death; (140) Following childbirth (not otherwise defined); (141) Puerperal diseases of the breast.

The abridged International List of Causes of Death (same revision) makes but two divisions of all the causes of death included in the detailed list under The Puerperal State. These divisions are:

(31) Puerperal septichæmia (puerperal fever, peritonitis), corresponding to number (137) of the detailed list.

¹ Part II will be of interest chiefly to students of statistics.

² For a discussion of this subject see Bureau de la statistique générale de la France: *Statistique Internationale du Mouvement de la Population*, 1913, p. 155*.

(32) Other puerperal accidents of pregnancy and labor, corresponding to Nos. (134), (135), (136), (138), (139), (140), and (141) in the detailed list.

In this report in the discussion of the Census figures and the tables, the classification of deaths according to the International List of Causes of Death, second revision, is used. The names for the different groups have been slightly changed, as it was felt that the names used in the International List give a misleading or obscure impression to those unfamiliar with this list.

In giving deaths and death rates the following terms and classification are used:

(a) *Childbirth, or all diseases caused by pregnancy and confinement*, which is the sum of (b) and (c) and corresponds to VII—The Puerperal State of the detailed International List and to the sum of (31) and (32) of the abridged International List.

(b) *Puerperal septicemia, or childbed fever*, which corresponds to (31) Puerperal septicæmia of the abridged International List, and to (137) Puerperal septicæmia of the detailed International List.

(c) *All other diseases caused by pregnancy and confinement*, which corresponds to (32) Other puerperal accidents of pregnancy and labor of the abridged International List, (134) to (136), and (138) to (141) of the detailed International List.

A few words of explanation may be useful with regard to these diseases and complications. In the term "accidents of pregnancy" the word "accident" is not used in its ordinary sense but in the sense of complications due to the pregnant condition. It includes miscarriage, severe hemorrhage during pregnancy, uncontrollable vomiting, and other complications.

"Puerperal hæmorrhage" includes severe hemorrhage at or following labor. It includes placenta prævia.

"Other accidents of labor" includes cases of difficult labor, operative delivery, rupture of the womb, and other complications, except hemorrhage, occurring at the time of labor.

"Puerperal septicæmia" (childbed or milk fever) is an infection coming on after labor or miscarriage.

"Puerperal albuminuria or convulsions," or "eclampsia," is an acute toxemia occurring during pregnancy, or during or after confinement, characterized, in its severest form, by convulsions.

"Phlegmasia alba dolens," often known as "milk leg," is a disease characterized by the swelling of a leg after confinement or miscarriage. The cause is the stoppage of a large vein of the thigh by a blood clot.

"Embolus" means blood clot. Sudden death may result from the carrying of such a blood clot to the heart or lungs.

"Following childbirth" (not otherwise defined) includes among other conditions insanity occurring after pregnancy or labor.

"Puerperal diseases of the breast" include inflammation or infection of the breast during lactation.

Death-registration area.

The statistics of causes of death are available only for a certain portion of the United States, included in the so-called "death-registration area." Unlike other civilized countries, the United States has no uniform laws for the registration of births and deaths. Moreover, the efficiency of enforcement of existing laws varies greatly in the different States. The Bureau of the Census in 1880 therefore established a "death-registration area," which comprises "States and cities in which the registration of deaths is returned as fairly complete (at least 90 per cent of the total), and from which transcripts of the deaths recorded under the State laws or municipal ordinances are obtained by the Bureau of the Census."¹ In 1880 this area included but 17 per cent of the total population of the United States. As States and cities have passed better laws and obtained better enforcement they have been added to the registration area; the latter has increased greatly in size, but even in 1913 included only 65.1 per cent of the population of the United States. For the remaining 34.9 per cent of the population of the country we have no reliable statistics. This 34.9 per cent includes the population of the greater number of the Southern States and of many Middle Western and Western States outside of certain registration cities in these States which are included in the area. No statements can be made, therefore, of the number of deaths from any cause in the United States as a whole; only an estimate can be made on the assumption that for any cause of death the same rate prevails in the remainder of the United States as in the death-registration area.

Provisional birth-registration area.

The registration of births is still more incomplete in this country than is the registration of deaths. For 1910 the United States Bureau of the Census established a "provisional birth-registration area," including the New England States, Pennsylvania, Michigan, New York City, and Washington, D. C.²

Methods of computing the death rates from all causes connected with pregnancy and confinement.

(1) *Death rates per 100,000 inhabitants.*—Trask³ gives the definition, "Death rates may be expressed as the ratio of the total number of deaths, taken as a unit, to the population. For example: 1 in 60. The usual method, however, is to express these rates in terms of the

¹ U. S. Census. Mortality Statistics, 1911, p. 9.

² U. S. Census. Mortality Statistics, 1911, p. 25.

³ Trask, J. W. "Vital statistics." U. S. Public Health Service, Supp. to the Public Health Reports, No. 12, p. 69.

number of deaths per 1,000 population, or in some instances per 10,000 or even 100,000, or 1,000,000." In the publications of the United States Bureau of the Census the death rates of all diseases, including those of the diseases connected with childbirth, are usually expressed in terms of the number of deaths per 100,000 total population. But a death rate computed in this way obviously gives a very misleading impression with regard to a disease to which only one group of the population is liable. In computing the death rate from the diseases connected with childbirth, only women of childbearing age should be considered, or, still better, only women actually bearing children in a given year. All individuals of all ages and both sexes may be exposed each year to a risk of typhoid fever, pneumonia, or tuberculosis; but during the year only the women pregnant or bearing children are exposed to the risk of death from the diseases connected with these functions.

(2) *Death rates per 100,000 women.*—This method of computing rates is somewhat superior to that of computing the deaths per 100,000 total inhabitants. It is used to some extent in foreign reports. These rates have been computed from estimates of female population furnished by the United States Bureau of the Census for the years 1900 to 1910 for the group of 11 States within the death-registration area in 1900. These are given in Table IV, on page 50.

(3) *Death rates per 100,000 women of childbearing age.*¹—Such a rate, which is a much more accurate one than either of those mentioned above, can be computed for the registration area for only one year, the census year 1900. For that year only has the age and sex distribution of the registration area been published. The number of women 15 to 44 years of age in the registration area in that year was 7,383,154.² The number of deaths from childbirth among women 15 to 44 years was 3,712; of these 1,594 were from puerperal septicemia and 2,118 from all other diseases of pregnancy and confinement.³ The death rates were, therefore, from childbirth or all diseases caused by pregnancy and confinement, 50.3; from puerperal septicemia, 21.6; and from all other diseases of pregnancy and confinement, 28.7.

(4) *Death rates per 1,000 births.*—As shown above, the method of computation of death rates which gives the clearest picture of the hazards of childbirth is that which takes into account only the women giving birth to children in that year. This is the method in use in a large number of foreign countries. The advantages of the method are self-evident.⁴ A demonstration of the superiority of

¹ The female population between the ages of 15 and 45 years as determined by census enumeration, or by estimation for intercensal and postcensal years.—Trask, J. W. *Supra cit.*, p. 23.

² U. S. Twelfth Census, 1900. Vital Statistics, Part I, p. XLII.

³ U. S. Twelfth Census, 1900. Vital Statistics, Part II, p. 242.

⁴ Each death rate is in terms of registered, i. e., living, births. This is a more accurate measure than a statement per 1,000 of total population or per 1,000 total or married women at childbearing ages.—News-holme, A. *Maternal Mortality in Connection with Childbearing*. Grt. Brit. Local Govt. Bd., Supp. to Report of Medical Officer for 1914-15, p. 24.

this method of computation is obtained by a study of the tables giving the death rates from these diseases for foreign countries. In certain countries, as for instance Belgium and Hungary, there has been in recent years an apparent fall in the average death rates as computed per 100,000 population, while the average rates computed per 1,000 live births have remained stationary or risen. This phenomenon is due, evidently, to a decline in the birth rate in these countries during these years, and shows how misleading the rates as given per 100,000 population undoubtedly are in countries with declining birth rates. Whether a fall in the birth rate has occurred in the United States is not known. If it has occurred in the registration area, it would mean that the slight rise in rates per 100,000 population between 1900 and 1913 means a greater rise in rates computed according to the number of births. Such an error might compensate for the opposite error due to the more complete registration of deaths from childbirth in the later years of this period.

In computing the rates per 1,000 births two methods are in use: The computation of the number of deaths per 1,000 total births and that per 1,000 live births. Both methods depend upon an accurate registration of births; the first method is used in those foreign countries in which all births including stillbirths are required to be reported; the second, in those countries where only live births are reported. The first is probably the better method, because by it the whole number of women bearing children in a certain year is considered. But even this rate is not absolutely accurate. While the number of deaths includes those from diseases connected with miscarriage, the whole number of women having miscarriages is not used as a base, but only the number of those bearing stillborn and live children. Miscarriages are not reportable in any country, although a number of miscarriages (as the term is usually defined) probably are reported as stillbirths in certain countries. The fact that women having miscarriages are not considered in the base would lead to a somewhat higher death rate than that which would express absolutely the number of deaths per 1,000 women at risk. On the other hand, in the computation of this rate the fact is not taken into consideration that a certain number of births are multiple; that is, the number of births is larger than the number of women bearing children. Still another objection to the use of this rate, especially in the comparison of the rates of different countries, is the fact that the definition of stillbirth varies greatly according to the laws of different countries;¹ that is, in one country many cases may be reported as stillbirths which in another country, having a different

¹ Royal Statistical Society. "Report of special committee on infantile mortality." *Journal of the Royal Statistical Society*, 1913, Vol. LXXVI, p. 27.

interpretation of this term, might not be reported at all, as they would be classed as miscarriages.

The second method, in which the number of deaths per 1,000 live births is considered, is that used by foreign countries in which the registration of stillbirths is not required. England and Wales, Ireland, Scotland, and New Zealand are among this number.

The variation in different countries with regard to the definition of stillbirth causes a difficulty in the use of this method. In three of the countries studied—France, Belgium, and Spain—the term stillbirth includes infants alive at birth but dying before the registration of birth, i. e., within one to three days of birth. Because of these various difficulties, death rates for the foreign countries have been, wherever possible, computed by both methods.

On account of the lack of accurate birth registration neither method has been used in computing rates for the United States. Only for States and cities in the provisional birth-registration area, and for one year, 1910, can the death rates per 1,000 live births be given. These are shown in Table VI, page 52.

SOURCES OF ERROR IN THE STUDY OF DEATH RATES FROM CHILDBIRTH.

In all mortality statistics, and especially in those with which we are especially concerned in this bulletin, there are two general sources of inaccuracy in the figures: First, the figures for each year may be inaccurate, or may give an incomplete picture of actual conditions because of many different factors, such as incompleteness or inaccuracy of the figures, inappropriate methods of classification or computation, etc. Second, the figures for different years may not be comparable simply because of the great improvements that are made each year in methods of registration, computation, and classification. With the object in view of giving each year as accurate and clear a picture of the actual conditions as possible, tremendous advance in methods has been made yearly in this country and in other countries. This very advance, however, brings with it many difficulties in comparing the figures for the years before such improvements were instituted with those of the years after that time. Each year the figures give us more accurate information of the actual number of deaths and of the death rates; yet each year the comparison of the figures for that year with those in the past is fraught with more danger of error. In general, therefore, the study of the actual number of deaths and the death rates for the last years for which figures are obtainable is more valuable than any comparison of rates for different years. All these sources of error will now be discussed in detail.

Inaccuracy of returns.

As all mortality statistics depend upon the returns of the cause of death as given by the physician or other person on the death-certificates, their value depends on the degree of accuracy of diagnosis shown by these returns. As Hoffman¹ has pointed out, the returns for countries in which a medical certificate of the cause of death is not required must be of very small value. He states, however, that "For most of the civilized countries this requirement is met to a reasonably satisfactory degree."

The objection has frequently been raised, however, that there is a large percentage of error even in the returns made by physicians due to mistakes in diagnosis, such errors being more numerous in the case of certain diseases than of others. This matter has been considered by the United States Bureau of the Census.² Hoffman³ defends the general validity of the death returns. He admits that there is serious risk of error in the "Careless or superficial use of the data of mortality statistics, irrespective of the diseases dealt with; for, as pointed out by Longstaff, * * * 'there are numerous fallacies to which the classification of deaths according to their alleged causes is liable,' and he enumerates particularly * * * the more or less varying proportions of indefinite causes, the deliberate falsification of returns for personal or family reasons, and the effect of the progress of medical science, improved diagnosis, etc." Hoffman, however, concludes: "All of these reasons notwithstanding, the conclusion appears to be incontrovertible that on the whole the present system of death registration is entitled to confidence and the results approximately represent the true state of the nation's health."

With regard to the diseases in question, however, inaccuracy of the returns undoubtedly constitutes a special source of error in the figures for all countries. The statistics of deaths due to puerperal septicemia (childbed fever or infection at the time of miscarriage or childbirth) are without question very incomplete. Many deaths due to this disease are reported, for obvious reasons, as due to some other condition or to some general condition, such as septicemia, pyemia, and the like. This fault in all statistics on the subject has been commented on very frequently both in this country and in foreign countries.⁴

¹ Hoffman, F. L. *The Mortality from Cancer Throughout the World*, 1915, p. 2.

² U. S. Census. *Mortality Statistics*, 1912, p. 24.

³ Hoffman, F. L. *Supra cit.*, p. 3.

⁴ (a) It is very difficult to make accurate statements as to the frequency of puerperal infection, especially when it occurs outside of hospital practice. Concerning this condition the vital statistics of the health officers of the various American cities are of no value, inasmuch as the vast majority of deaths from this disease are returned as being due to malaria, typhoid fever, pneumonia, or other causes.—Williams, J. W. *Obstetrics*, 1913, p. 900. (b) It is very difficult to estimate the frequency of puerperal infection outside of hospitals, since many deaths are reported as due to typhoid, malaria, pneumonia, etc.—Edgar, J. C. *The Practice of Obstetrics*, 1903, p. 752. (c) It is not unlikely, furthermore, that in a considerable number of deaths due to childbearing the fact that they are associated with childbearing escapes certification.

It follows, however, that almost never is a case reported as due to infection at confinement when it is really due to some other cause; in other words, the figures though undoubtedly incomplete are reliable as far as they go; they are a statement of the minimum number of cases which have occurred. As Newsholme remarks,¹ many cases of puerperal septicemia probably are reported as due to other conditions associated with childbirth; so that the total figures for all diseases associated with this condition should always be noted, although it may be the figures for puerperal septicemia in which our immediate interest lies.

Many deaths due to other complications of pregnancy and confinement are also undoubtedly reported under other headings. This is especially true of cases of puerperal albuminuria and convulsions, which are reported as due to acute nephritis or simply to convulsions; and of hemorrhage or phlebitis following miscarriage or labor, reported without reference to their connection with childbirth.

Limited area and short period of time represented by figures.

In the United States the limited area of the country (the death-registration area) for which any figures are available is an element of weakness in the statistics. Though this area and its population are absolutely very large, they can not be considered as representative of the entire country. Any estimate based on the figures for the registration area is open to criticism on account of differences in age and sex distribution in different parts of the country.

In the United States the short period for which any figures are available lessens greatly the value of a study such as this. In foreign countries comparisons of the death rates for a long series of years may be made, even though errors due to lack of comparability of the figures may occur. In this country information is available

Deaths from puerperal fever are likely also to be understated; and the desirability is confirmed of basing inferences as to excessive mortality from childbearing on all the conditions concerned in this mortality, and not merely on the death returns for puerperal fever.—Newsholme, A. *Supra cit.*, pp. 26, 30. (d) It may be objected that owing to faulty registration and deficient death certification the returns are not reliable. That this objection may have some weight in estimating the amount of mortality, especially as regards puerperal fever (in which for obvious reasons the death returns are avowedly defective), I fully admit; but, as this communication seeks to compare the mortality of one year with that of another and of one part of the kingdom with that of another, and as the sources of error apply to each, the result can not be materially affected. In estimating the true amount of mortality, however, a mental correction should certainly be made for this obvious source of error.—Boxall, R. "The mortality of childbirth," *Lancet*, 1903, Vol. II, p. 10. (e) Warren, S. P. "The prevalence of puerperal septicemia in private practice at the present time, contrasted with that of a generation ago." *Amer. Jour. of Obstetrics*, 1905, Vol. LI, p. 301.

¹ But the above extreme local variations in the proportion between deaths from puerperal fever and from other dangers of childbearing suggest that in death certification there may be local variations in the extent to which deaths from puerperal fever are returned under the heading of other conditions associated with childbearing. * * * On the whole, it is likely that in comparing counties and county boroughs with each other, the safest plan is to utilize only the death rates from the two sets of conditions taken together.—Newsholme, A. *Supra cit.*, p. 26.

only for the census years 1880, 1890, and 1900 and for the calendar years from 1900 to 1913, inclusive. Moreover, the area covered by the reports previous to 1890 was so small that any comparison between years prior to 1890 and years subsequent to that date has seemed unwise.

Methods of computation.

In the United States the computation of the death rates from the diseases in question by a method (computation per 100,000 total population) giving but an inaccurate picture of the facts is necessarily a source of error in the study. This method also makes difficult a comparison of the death rates with those of foreign countries.

Sources of error in comparisons of death rates of different years.

There are many special sources of error involved in the comparison of death rates of the registration area of the United States from these causes in different years.

First. Differences in the constitution of the death-registration area cause one of the most important difficulties in comparison. As before stated, the death-registration area is not an unchanging entity, but has been added to almost yearly as registration has improved in various States and cities. This constant increase constitutes a serious source of error in comparing the death rates for this area for different years. Within the course of the years studied, States or cities having a particularly high or low rate from the disease in question may have been added to the registration area.¹ This difficulty is so serious that in making comparisons of the death rates in the registration area of the United States from a certain disease through a series of years the publications of the United States Bureau of the Census always point out the influence which the inclusion of a certain State may have had upon the rate of the disease in question for the registration area.

The same method may be applied, for example, to a comparison of the death rates from childbirth in the registration area for the years 1909 and 1910. In 1909 the rate for the registration area was 15.3; in 1910, 15.7. In 1910, however, four States—Minnesota, Montana, Utah, and North Carolina²—were added to the registration area and one State—South Dakota—was dropped. In that year the death rate from childbirth in Minnesota was 11.9 per 100,000 inhabitants, in Montana 16.4, in Utah 18.4, and in the municipalities of North Carolina 30.7. That in South Dakota in 1909 was 21.7 for the urban and 12.9 for the rural portions of the State. Evidently the exact determination of the effect which the inclusion or exclusion of any one of these States exerted upon the death rate of the registration area is a complicated matter.

¹ U. S. Census. Mortality Statistics, 1909, p. 9.

² Municipalities of 1,000 or more inhabitants in 1900.

It was thought wise, therefore, in this study to make, in addition to a comparison of the death rates from childbirth in the registration area for 1890 and from 1900 to 1913, a comparison of the death rates shown (1) for the same series of years by the group of States which have been registration States since 1890, and (2) for the years 1900 to 1913 by the group of States which have been registration States since 1900. Obviously these two comparisons contain no error due to changes in the groups of States compared from year to year.

The group of eight States which have been registration States since 1890 includes all the New England States except Maine, also New York, New Jersey, and the District of Columbia. (See Table II, p. 49.) For this group of States no permanent decrease has occurred in the death rate from childbirth per 100,000 population in the 23 years studied. There was a decrease in the rate between 1890 and 1900, followed by a rise, and then by slightly fluctuating rates. The rates for 1890¹ and 1913, however, are almost identical—14.1 and 14.3 per 100,000 inhabitants.

The rates for the second group of 11 States show no decline but rather an increase in the 13 years from 1900 to 1913. These States have been registration States since 1900 and include, besides the 8 above mentioned, Maine, Michigan, and Indiana. The death rate from childbirth in 1900² was 13.4; in 1913, 14.9; with fluctuations between 12.7 and 15.5.

The fact that the death rates from childbirth show no decrease in the registration area from 1890 to 1913 (see Table I, p. 49) is therefore corroborated by the two comparisons just made. The rates for this area also show fluctuations from year to year, but are nearly identical for 1890 and 1913, i. e., 15.3 and 15.8.

This possible source of error in the comparison of the rates in the registration area for different years, therefore, is shown to be of practical unimportance.

A comparison of the three Tables I, II, and III brings out several interesting facts. Tables I and II both show a decline in the rates between 1890 and 1900; this fall is followed by a corresponding rise and fluctuating rates. The rates for the group of 8 States shown in Table II are almost uniformly slightly lower for each year than are those of the death-registration area shown in Table I.

Second. The most important source of error in the comparisons of the death rates of various years is due to the improvements which have been made yearly in the accuracy of the returns of the cause of death. In each State, newly admitted to the registration area, improvements are made continually in the completeness and accuracy of the death returns. In addition one special improvement has been made in the returns in the registration area.

¹ Census year ending May 31.

² Calendar year

It has already been pointed out with regard to the diseases under consideration that deaths due to puerperal septicemia and to other complications of pregnancy and confinement are frequently reported as due to such indefinite causes as septicemia, pyemia, hemorrhage, phlebitis, convulsions, etc. In several foreign countries the attempt has been made for some years to render the records more complete by making inquiries as to cases of death of women of childbearing age where the cause of death is an indefinite one of this character. To each physician making such a report for a woman of childbearing age a confidential inquiry is sent, asking whether or not the cause of death had any relation to childbirth or miscarriage. Boxall¹ states that this has been done in England since 1881 and has resulted in an increase of about 12 per cent in the number of cases reported as due to puerperal septicemia. In this country since about 1906² the State registrars of vital statistics have cooperated with the United States Bureau of the Census in making their reports more complete through this practice.

For several years³ the Census Bureau has made an inquiry in many cases where the cause of death of a woman of childbearing age has been returned to it as septicemia, pyemia, or peritonitis, and additional cases of puerperal septicemia have been added in this way. That bureau is unable, however, to estimate the percentage of cases which have thus been added. In a test⁴ in which a number of letters of inquiry were sent to physicians returning deaths as due to meningitis, paralysis, convulsions, pneumonia, and peritonitis, 102 cases returned as peritonitis were thus investigated. Eight cases were changed to puerperal septicemia following the answer to these inquiries. The following statement is made: "If the percentages of change resulting from this investigation, which, though limited, may prove to be fairly representative, be applied to the numbers of deaths compiled from the various causes for the registration area for 1911, * * * some of the definite causes would be increased as follows: * * * Puerperal septicemia from 4,376 to 4,560, or 4.2 per cent."⁵

Without doubt, therefore, the records in this country since 1906, and especially since 1912, are more complete than those for previous years.⁶

Obviously greater accuracy of the returns leads to an apparent rise in rate, even when the true death rate is stationary or declining slightly. It is impossible to estimate how great has been the influence

¹ Boxall, R. "Mortality in childbed, both in hospital and in general practice," *Jour. of Obstetrics and Gynecology of the British Empire*, 1906, Vol. VII, p. 322; Newsholme, A. *Supra cit.*, p. 25.

² Statement by Chief Statistician for Vital Statistics, U. S. Bureau of the Census.

³ U. S. Census. *Mortality Statistics*, 1911, pp. 37, 38.

⁴ Similar improvements in the records for other causes of death have been made in recent years through the method of making similar inquiries with regard to deaths reported as due to such indefinite causes as simple meningitis, paralysis without specified cause, etc. See U. S. Census. *Mortality Statistics*, 1912, pp. 23, 24, and Dublin, L. I., and Kopf, E. W. "An experiment in the compilation of mortality statistics," *Quart. Public. of the Amer. Stat. Assn.*, 1913, Vol. XIII, p. 639.

of this factor upon the death rates of childbirth and of puerperal septicemia since 1900. As an index the changes in the death rates for the death-registration area from the indefinite causes, "purulent infection and septicemia," "simple peritonitis," "convulsions," and "hemorrhage, other diseases of the circulatory system," between 1900 and 1913 should be studied.

It is significant that the average death rate from purulent infection and septicemia, which in 1901-1905 was 6.1 per 100,000 population, fell in 1906-1910 to 3.8 and then decreased steadily, being 2.8 in 1913.¹ In the same way the death rate from simple peritonitis, which was 10.8 in 1901-1905, fell to 6.1 in 1906-1910 and 2.7 in 1913.¹ The other causes mentioned have shown a decline which is much less marked.

As these death rates represent those of the entire population, not those of women of childbearing age, their decline can be ascribed only in part to the fact that a number of cases formerly returned as due to these causes are now ascribed to puerperal septicemia and other diseases caused by pregnancy and confinement. It is plain, however, that this factor has been a very important one in determining their decrease.

In general, then, it may be stated that recent improvements in death certification must be borne in mind in making comparisons of the death rates from childbirth since 1900; that these improvements probably account for the apparent rise in the death rate between 1900 and 1913, and may, indeed, conceal a slight actual decrease in the rates during those years. It is not, however, probable that any substantial decrease in rate has been concealed in this way.

The comparisons made in Tables II and III of rates for the group of 8 States which have been in the registration area since 1890 and for that of 11 States which have been in this area since 1900 are probably less subject to this source of error than is a comparison of rates for the registration area. In the States in which registration has been good for a number of years improvements made in the returns for the more recent years will not be so marked a factor.

Third. A third source of error in the comparison of death rates for various years in this country results from the changes in classification of causes of death which have been made. In the United States the International List of Causes of Death was adopted for use in the calendar year 1900. A different classification was in use before that time. The group of diseases included in the older classification under "Affections connected with pregnancy" are included under the title "The puerperal state," Division VII of the detailed International List (see p. 29), corresponding to the terms "Child-

¹ U. S. Census. Mortality Statistics, 1913, pp. 53, 54.

birth" or "All diseases caused by pregnancy and confinement" as used in this bulletin. Therefore these large groups can be compared for the census years 1890 and 1900 and the calendar years 1900 to 1913. The title puerperal septicemia of the older classification does not correspond, however, to that of "puerperal septichæmia" of the International Classification. Nevertheless, it has been thought best to print the figures for puerperal septicemia for the census years 1890 and 1900 with the warning that these figures are not exactly comparable with the figures for this disease for the calendar years 1900 to 1913. At the second revision of the International Classification, in force for the registration area January 1, 1910, several changes were made in the classification of the group of diseases with which we are concerned, i. e., "The puerperal state." These changes do not affect the whole group, but only the subgroups, especially No. 137, "Puerperal septichæmia." Three causes of deaths included under this heading under the first revision were removed and included under other headings; these are: Puerperal toxemia, included now under 138; puerperal phlebitis, changed to a separate heading, 139; and retention of the placenta, now included under 135. No other groups previously not included were added to "Puerperal septichæmia" in that year. These changes would naturally cause a decrease in the number of deaths ascribed to puerperal septicemia and a corresponding decrease in the death rate for this disease, with an increase in the rate of those included under "Other diseases caused by pregnancy and confinement." This must be remembered in comparing the rates for years succeeding 1910 with those preceding it, both in the United States and in all other countries studied. How far this change in the death rate for puerperal septicemia compensates in the United States for the opposite error due to the more complete returns for this disease brought about by the inquiries sent by the Bureau of the Census it would be impossible to say.

Sources of error in a study of foreign statistics.

It may be claimed that a comparison of the vital statistics of various foreign countries involves a certain risk of error due to differences in the methods of registration employed in the various countries and in the degrees of accuracy of the returns. For instance, the comparatively low death rate of a certain country may be explained as being due to the incompleteness of the returns in that country. Beyond this source of error, which can not be avoided, two other especial sources appear to exist in the comparison of the death rates from the diseases caused by childbirth. The first one is that already treated at some length, i. e., the development of errors due to the different methods used by different countries in computing the rates. This source of error has been avoided by reckoning the rates uniformly for

each country in the group considered according to two different methods, i. e., per 100,000 total population and per 1,000 live births. While neither method of computation is an ideal one, it has been necessary to use them as they alone give a basis of comparison of the rates of all the countries considered.

A second source of error has also been alluded to; it is the lack of uniformity in methods of classification of the causes of death. Many of the countries under consideration have not used the International Classification at all, or only for a portion of the period studied. As the best means available for avoiding this difficulty, the figures for each country have been used as published in the *Statistique Internationale du Mouvement de la Population d'après les Registres d'Etat Civil*, prepared by the *Ministère du Travail, Bureau de la Statistique Générale* of France. In this publication figures for countries not using the International Classification have been rearranged to conform as nearly as possible to the divisions of the International List. Figures, however, are available from this source only up to the year 1910; for the years following, figures have been obtained from the latest available original reports of each country. For those countries not using the International Classification the figures have been rearranged in the same way to conform to it as nearly as possible.¹

Slight differences in methods of classification will probably not affect the death rates to any great extent, nor will they often affect the number of deaths, and consequently the death rates, of the whole group of diseases—"The puerperal state," or "All diseases caused by pregnancy and confinement." Only the proportion of deaths to be ascribed to either of the two subgroups "puerperal septicemia" and "other diseases caused by pregnancy and confinement," will be affected. A rearrangement of the deaths within the group, ascribing a larger number of deaths to puerperal septicemia will bring, of course, a decrease in those reported as due to "other diseases caused by pregnancy and confinement." For this reason, therefore, the total number of deaths for the large group and the death rate for this group are more important than those of the subgroups. (See p. 36.) An exception to the statement in regard to the differences in method of classification must be made for the figures of England and Wales. Previous to 1911, the year in which the International Classification was adopted, a certain group of deaths almost universally included under the large group "The puerperal state" or "All diseases caused by pregnancy and confinement" was not included in the English and Welsh figures, i. e., deaths due to puerperal nephritis and albuminuria. Consequently in these earlier years the reports of deaths

¹ On pages 57 to 59 will be found especial notes as to difficulties encountered in the reclassification of the figures of various countries.

ascribed to childbirth or all diseases caused by pregnancy and confinement are incomplete and the death rates from this group of causes are lower than would have been the case had the International Classification been used. This fact must be remembered in making comparisons between England and Wales and other countries. The amount of the error, which is not a very large one, can be estimated by noting the number of deaths annually reported from this cause for the years 1911 to 1914. (See p. 58; also Table XV, p. 60.) Whether or not there is the same incompleteness in the figures of other countries could not be learned from the reports.

In general, foreign statistics have been used in this report as giving a rough estimate of actual conditions. Unfortunately more exact information is not in existence. It has not been considered wise, in view of the possibilities of error in the material, to use any method of analysis which assumes a higher degree of accuracy than can be attributed to all the existing figures.

FOREIGN STATISTICS.

Comparison of the average death rates from childbirth in certain foreign countries and in the United States.

1. *Average death rates per 100,000 population.*—In order to obtain a basis for comparison with the rates for the death-registration area of the United States the average rates for 15 foreign countries have been reckoned according to the number of deaths per 100,000 population. These rates are given in Table XII, on page 56, in which the countries are arranged in order, the one having the lowest rate being first. Many of the countries show rates differing but very little from that of the United States. The rates for 9 of the 16 countries vary between 12.4 and 15.2, while that of the registration area is 14.9. Other facts brought out by this table are mentioned on page 22.

2. *Average death rates per 1,000 live births.*—It has been realized that the average death rate from these diseases as above computed gives a very misleading idea of the actual death rate on the basis of the number of women bearing children. Differences in the age and sex composition of the population of the countries studied, and, above all, differences in the birth rate, obviously lead to great error. Unfortunately the rate per 1,000 births can not be given for the death-registration area of the United States, though it can be given for one year (1910) for the provisional birth-registration area. This rate is 6.5 per 1,000 live births. The comparison of such a rate, for a limited area of a country reckoned only for one year, with average rates of other countries reckoned for a series of years, is of course unfair. Still it is a noteworthy fact that the rate for this small area of the United States is considerably higher than that for any country in the group considered.

Table XIII, page 56, gives the average death rates reckoned per 1,000 live births for the 15 foreign countries already studied arranged in order, the one having the lowest rate being first. The order here shows a considerable variation from that in the previous table. However, the same group of countries shows the lowest rates computed according to either method of computation; these are Sweden, Italy, and Norway. Similarly, the highest rates in both tables are shown by a second group of countries—Belgium, Spain, Switzerland, Australia, and Scotland. The rates for Ireland form an exception. The rate for that country, reckoned per 100,000 inhabitants, is only moderately high; reckoned per 1,000 live births, however, it is one of the higher rates.

3. *Percentage of deaths caused by puerperal septicemia.*—Another interesting feature of the foreign figures is the great variation shown among the different countries in the percentage of the total deaths from childbirth which are ascribed to puerperal septicemia. Table XIV gives these figures for each country for as large a part of the period 1900 to 1910 as figures are available. As pointed out frequently throughout this report, on account of the inaccurate returns from puerperal septicemia the total rate from childbirth is a more reliable one than is the rate from puerperal septicemia; therefore, sweeping conclusions can not be based on these comparisons. Otherwise these figures would be extremely significant, as the deaths from puerperal septicemia are the most easily preventable of all the deaths from childbirth. In the larger number (11) of the 15 foreign countries studied the deaths from puerperal septicemia constitute from 30 to 50 per cent of the total number of deaths from childbirth. In the registration area of the United States they represent 44 per cent. Norway, 51.2 per cent, and Spain, 62.8 per cent, show the only two percentages higher than 50; New Zealand, 25.2 per cent, and Hungary, 26.7 per cent, show markedly low percentages.

Comparison of the changes in the death rates from childbirth in certain foreign countries for the years 1900 to 1913.

Far more valuable than a comparison of average rates of foreign countries is a study of the rates of each country for a series of years in order to discover whether they are decreasing or increasing and to compare such changes in the various countries. While it may be dangerous on account of different methods of registration and classification to compare the rates of different countries, no such source of error is attached to the comparison of rates in the same country for a number of years. The period 1900 to 1913 (or the latest year for which figures are available) is a very short one for a study of a change in death rates. It would have been far more interesting to study the death rates for a long series of years in each country, choosing a

period beginning before the introduction of methods of asepsis. But such a study for the complete list of countries considered was not thought advisable, because of the difficulties caused by variations in classification of causes of death in the earlier years.

In order to study the rates for any increase or decrease occurring during the last 13 years, the rates per 1,000 ¹ live births will be used rather than those per 100,000 population. In several countries—Belgium, Hungary, Italy, Norway, Prussia, and Spain—the rate from childbirth per 100,000 population apparently has fallen during the period, while the rate per 1,000 live births has remained almost the same, or has risen. The cause of this inconsistency, as explained on page 33, is the fact that in these countries the birth rate or the proportionate number of births to the number of inhabitants has decreased.

Average death rates for the foreign countries studied are given for periods of from 3 to 5 years in Table XVI. Differences in averages from period to period are more significant than differences in rates from year to year, and they indicate more accurately and readily whether death rates in a given country are increasing or decreasing.

In preparing Table XVI it would have been more satisfactory to base averages on identical five-year periods for all countries, but since the periods for which the information was available varied so widely in different countries, this procedure was impracticable, and the complete periods were divided into as nearly uniform subperiods as possible.

The countries will be considered in different groups.

Countries showing a decrease in the death rates from all diseases caused by pregnancy and confinement.—England and Wales show a fall in the total death rate from these diseases and also a fall in the death rate from puerperal septicemia in the years between 1900 and 1914.² The total death rate per 1,000 live births fell from 4.4 in 1900–1904 to 3.7 in 1910–1914. The death rate from puerperal septicemia per 1,000 live births was 1.9 in 1900–1904, and 1.4 in 1910–1914. The still greater apparent drop in the rates per 100,000 inhabitants will be noted. This decrease in the rates from these diseases in England and Wales since 1900 is especially important because the lack of decrease for a long period of time before 1900 has been the subject of considerable discussion.

Boxall³ in 1893 and 1905 published two reports which aroused medical interest. Based on studies of the figures published by the

¹ The rate per 1,000 live births will be found in column 8 of Table XV, p. 60.

² In studying the figures after 1910, only the figures given as 1911 (a) and 1912 (a), etc., must be compared with the figures of years before 1910, for the reasons explained on p. 58.

³ Boxall, R. "The mortality of childbirth," *Lancet*, 1893, Vol. II, p. 9; "Mortality in childbed, both in hospital and in general practice," *Jour. of Obstetrics and Gynecology of the British Empire*, 1905, Vol. VII, p. 315.

registrar general, these reports comment on the lack of decrease in the total mortality from childbirth and from puerperal septicemia in the period since the introduction of methods of antiseptics.

Sir Arthur Newsholme, medical officer of the Local Government Board of England, published last year a most interesting report on maternal mortality in connection with childbearing in England and Wales.¹ The report in question will no doubt be the inspiration of studies of this subject in many countries, just as it has been of the present report on conditions in the United States. He finds that from 1874 to 1893 there was no decline in the rates from puerperal septicemia, or from other conditions associated with childbirth, but that since 1895 there has been a marked decline in the rate from puerperal septicemia and a decline in the total rate from childbirth. There has been, however, little change in the death rate from conditions other than puerperal septicemia caused by childbirth. He writes: "Even so far as puerperal fever is concerned, notwithstanding the improvement already secured, it must be regarded as highly unsatisfactory that in 1914 for every 644 infants born 1 mother lost her life from puerperal infection, either present before the birth of the infant, or more often acquired during or soon after its birth. A large portion of this mortality, with its still greater amount of associated sickness, could at once be prevented were adequate antenatal care and skilled attendance under satisfactory conditions at and after birth made available."¹

The interest in this subject in England is reflected in several acts which have been passed in recent years with the object of securing better antenatal and confinement care for all women at childbirth. These are the midwives act, 1902; the notification of births act, 1907; the notification of births (extension) act, 1915, the maternity benefits under the national insurance act, and the voting of grants by Parliament in aid of work done by local authorities and voluntary agencies to promote maternal and child welfare work.

The rates for Ireland show a decrease in the death rate from childbirth. In 1902 to 1906 the rate was 5.8; in 1911 to 1914 it was 5.2. There was also a slight decrease in the rate from puerperal septicemia.

Japan shows also a fall in the rate from childbirth from 4.2 in 1901-1904 to 3.6 in 1909-1912. The death rate from puerperal septicemia, however, has increased slightly.

The rates for New Zealand and Switzerland have also shown a decline in the periods studied.

Countries showing almost stationary rates from the diseases caused by pregnancy and confinement.—This group includes all the remaining countries considered except Scotland. In several of these countries

¹ Newsholme, A. *Maternal Mortality in Connection with Childbearing*. Grt. Brit. Local Govt. Bd., Supp. to Report of Medical Officer for 1914-15, pp. 22, 23.

there has been a slight fall or rise in the rates between the first and last period, amounting in each case to less than 0.5 of 1 per 1,000 live births.

In Prussia no demonstrable fall has occurred in the rate per 1,000 live births from all diseases caused by pregnancy and confinement, nor in that from puerperal septicemia. The total rate in 1903 to 1906 was 3.2; in 1907 to 1910 it was 3.1.

The almost stationary rates for Australia, Belgium, Hungary, Italy, Norway, Spain, and Sweden will also be noted in the tables.

In all of these countries numerous physicians have called attention to the stationary or rising death rates from childbirth and from childbed fever. A large medical literature has grown up on this subject. Von Herff¹ comments on the figures published by Krohme, showing for Prussia an increasing death rate from puerperal septicemia in the years 1901 to 1904. He attributes it to the laxity of physicians in carrying out antiseptic methods and to the unnecessarily frequent use of forceps and to other obstetrical operations. Buess² and Winter³ are among those who have written more recently on the question of these death rates in Switzerland, East Prussia, and other European countries.

Countries showing a rise in rates.—The total mortality rate from diseases of childbirth for Scotland has shown a definite increase from 5.1 per 1,000 live births in 1901–1905 to 5.8 in 1911–1914. This increase, however, has not been due apparently to an increase in the rate from puerperal septicemia; in fact, this rate has shown a fall.

¹ Von Herff, O. "Wie ist der zunehmenden Kindbettfiebersterblichkeit zu steuern? Minderung der Operationen. Besserung der Desinfektion in der Hauspraxis." *Münchener Medizinische Wochenschrift*, 1907, Vol. LIV, p. 1017.

² Buess. *Zeitschrift für Geburtshilfe und Gynäkologie*, 1915, Vol. LXXVII, p. 735.

³ Winter. "Die Bekämpfung des Kindbettfiebers in Ostpreussen." *Deutsche Medizinische Wochenschrift*, 1908, Vol. XXXIV, p. 2244.

PART III. GENERAL TABLES.

TABLE I.—Population, deaths, and death rates per 100,000 population in the death-registration area from diseases caused by pregnancy and confinement, 1890 and 1900 to 1913.

Year. ¹	Population of death-registration area.		Deaths from diseases caused by pregnancy and confinement.					
			Number.			Rate per 100,000 population.		
	Total.	Per cent of population of United States.	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.
1890 ²	19,659,440	31.4	3,011	* 1,383	1,628	15.3	* 7.0	8.3
1900 ²	28,807,209	37.9	3,772	* 1,619	2,153	13.1	* 5.6	7.5
1900.....	30,765,618	40.5	4,106	1,769	2,337	13.3	5.7	7.6
1901.....	31,370,952	40.3	4,294	1,882	2,412	13.7	6.0	7.7
1902.....	32,029,815	40.4	4,164	1,813	2,351	13.0	5.7	7.3
1903.....	32,701,083	40.4	4,569	1,992	2,577	14.0	6.1	7.9
1904.....	33,345,183	40.4	5,109	2,291	2,818	15.3	6.9	8.5
1905.....	34,052,201	40.4	5,077	2,309	2,768	14.9	6.8	8.1
1906.....	41,983,419	48.9	6,341	2,622	3,719	15.1	6.2	8.9
1907.....	43,016,990	49.2	6,719	2,908	3,811	15.6	6.8	8.9
1908.....	46,789,913	52.5	7,344	3,271	4,073	15.7	7.0	8.7
1909.....	50,870,518	56.1	7,791	3,427	4,364	15.3	6.7	8.6
1910.....	53,843,896	58.3	8,465	3,892	4,563	15.7	7.2	8.5
1911.....	59,275,977	63.1	9,466	4,376	5,090	16.0	7.4	8.6
1912.....	60,427,247	63.2	9,035	3,905	5,130	15.0	6.5	8.5
1913.....	63,298,718	65.1	10,010	4,542	5,468	15.8	7.2	8.6
Annual average:								
1901 to 1905.....	32,699,843	.....	4,643	2,067	2,586	14.2	6.3	7.9
1906 to 1910.....	47,300,947	.....	7,380	3,224	4,106	15.5	6.8	8.7

¹ Calendar year, unless otherwise specified.

² Census year ending May 31.

* Figures for puerperal septicemia for the census years 1890 and 1900 not comparable with those for later years. See p. 41.

TABLE II.—Deaths and death rates per 100,000 population in the 8 States within the death-registration area in 1890¹ from diseases caused by pregnancy and confinement, 1890 and 1900 to 1913.

Year. ²	Deaths from diseases caused by pregnancy and confinement.					
	Number.			Rate per 100,000 population.		
	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.
1890 ³	1,655	* 698	957	14.1	* 6.0	8.2
1900 ³	1,806	* 791	1,015	12.6	* 5.5	7.1
1900.....	1,906	798	1,107	13.3	5.6	7.7
1901.....	1,903	747	1,156	13.0	5.1	7.9
1902.....	1,842	762	1,080	12.4	5.1	7.2
1903.....	1,998	801	1,197	13.1	5.3	7.9
1904.....	2,305	996	1,309	14.9	6.4	8.4
1905.....	2,434	1,033	1,401	15.4	6.5	8.9
1906.....	2,434	989	1,445	15.0	6.1	8.9
1907.....	2,595	1,086	1,509	15.6	6.5	9.1
1908.....	2,450	1,050	1,400	14.4	6.2	8.2
1909.....	2,537	1,034	1,503	14.5	5.9	8.6
1910.....	2,608	1,145	1,463	14.6	6.4	8.2
1911.....	2,722	1,179	1,543	14.9	6.4	8.4
1912.....	2,574	1,049	1,525	13.9	5.6	8.2
1913.....	2,707	1,140	1,567	14.3	6.0	8.3

¹ Excluding Delaware.

² Calendar year, unless otherwise specified.

³ Census year ending May 31.

* Figures for puerperal septicemia for the census years 1890 and 1900 not comparable with those for later years. See p. 41.

TABLE III.—Deaths and death rates per 100,000 population in the 11 States within the death-registration area in 1900 from diseases caused by pregnancy and confinement, 1900 to 1913. -

Year. ¹	Deaths from diseases caused by pregnancy and confinement.					
	Number.			Rate per 100,000 population.		
	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.
1900 ²	2,568	³ 1,180	1,418	12.9	³ 5.8	7.1
1900.....	2,682	1,155	1,527	12.4	5.8	7.6
1901.....	2,704	1,124	1,580	12.2	5.5	7.8
1902.....	2,626	1,092	1,534	12.7	5.3	7.4
1903.....	2,778	1,153	1,625	12.2	5.5	7.7
1904.....	2,216	1,408	1,813	15.1	6.6	8.5
1905.....	2,219	1,401	1,818	14.8	6.4	8.4
1906.....	2,220	1,302	1,927	14.5	5.9	8.7
1907.....	2,448	1,476	1,972	15.2	6.5	8.7
1908.....	2,343	1,421	1,912	14.4	6.2	8.2
1909.....	2,422	1,453	1,969	14.5	6.1	8.3
1910.....	2,641	1,624	2,017	15.1	6.7	8.4
1911.....	2,806	1,748	2,068	15.5	7.1	8.4
1912.....	2,527	1,488	2,080	14.1	6.0	8.2
1913.....	2,780	1,661	2,126	14.9	6.5	8.4

¹ Calendar year, unless otherwise specified.

² Census year ending May 31.

³ Figures for puerperal septicemia for the census year 1900 not comparable with those for later years. See p. 41.

TABLE IV.—Death rates per 100,000 female population in the 11 States within the death-registration area in 1900 from diseases caused by pregnancy and confinement, 1900 to 1910.

Year.	Death rate per 100,000 female population from diseases caused by pregnancy and confinement.			Year.	Death rate per 100,000 female population from diseases caused by pregnancy and confinement.		
	Total.	Puerperal septi-cemia.	All other.		Total.	Puerperal septi-cemia.	All other.
1900.....	26.9	11.6	15.2	1906.....	20.2	11.8	17.5
1901.....	26.7	11.1	15.6	1907.....	20.6	12.1	17.5
1902.....	25.5	10.6	14.9	1908.....	20.1	12.4	16.6
1903.....	26.6	11.0	15.5	1909.....	20.2	12.4	16.8
1904.....	30.3	12.2	17.1	1910.....	20.4	12.6	16.9
1905.....	29.8	12.0	16.8				

TABLE V.—*Number of deaths of women from 15 to 44 years of age in the death-registration area from each cause and class of causes included in the abridged International List of Causes of Death (revision of 1909),¹ 1913.*

[Computed from figures in Mortality Statistics, 1913, pp. 338 to 349, in which causes of death are given according to the detailed International List of Causes of Death.]

Abridged International List No.	Cause of death.	Number of deaths.
13, 14, 15 31, 32	Tuberculosis of the lungs, tuberculous meningitis, other forms of tuberculosis	26, 265
19	Puerperal septicemia (puerperal fever, peritonitis) and other puerperal accidents of pregnancy and labor	9, 876
29	Organic diseases of the heart	6, 396
29	Acute nephritis and Bright's disease	5, 741
16	Cancer and other malignant tumors	5, 065
22	Pneumonia	4, 167
35	Violent deaths (suicide excepted)	3, 222
1	Typhoid fever	2, 706
30	Noncancerous tumors and other diseases of the female genital organs	2, 669
26	Appendicitis and typhilitis	1, 620
36	Suicide	1, 562
23	Other diseases of the respiratory system (tuberculosis excepted)	1, 458
18	Cerebral hemorrhage and softening	1, 398
24	Diseases of the stomach (cancer excepted)	940
27	Hernia, intestinal obstruction	854
28	Cirrhosis of the liver	596
9	Influenza	489
17	Simple meningitis	484
8	Diphtheria and croup	330
12	Other epidemic diseases	312
6	Scarlet fever	307
6	Measles	304
3	Malaria	250
21	Chronic bronchitis	184
20	Acute bronchitis	90
33	Congenital debility and malformations	24
11	Cholera nostras	18
4	Smallpox	16
7	Whooping cough	9
2	Typhus fever	2
10	Asiatic cholera . . . . .	.....
37	Other diseases	11, 688
38	Unknown or ill-defined diseases	458

¹ Except No. 25, diarrhea and enteritis (under 2 years), and No. 34, senility.

MATERNAL MORTALITY.

TABLE VI.—Population, live births, deaths, and death rates per 100,000 population and per 1,000 live births from diseases caused by pregnancy and confinement, by States and principal cities in the provisional birth-registration area,¹ 1910.

Deaths from diseases caused by pregnancy and confinement.												
State and city.	Population July 1, 1910 (estimated).	Live births, 1910.	Total.		Puerperal septæmia.			All other.				
			Number.	Rate.	Number.	Rate.	Number.	Rate.				
									Per 100,000 popula- tion.	Per 1,000 live births.	Per 100,000 popula- tion.	Per 1,000 live births.
Provisional birth-registration area.....	22,222,404	592,390	3,652	16.4	6.5	1,612	7.3	2.9	2,040	9.2	3.6	
Connecticut.....	1,119,109	27,291	148	13.2	5.4	65	5.8	2.4	83	7.4	3.0	
Maine.....	743,352	15,578	110	14.8	7.1	46	6.2	3.0	64	8.6	4.1	
Massachusetts.....	3,351,037	86,766	412	12.2	4.7	166	4.9	1.9	246	7.3	2.8	
Michigan.....	2,830,108	63,596	474	16.8	7.5	196	7.0	3.1	278	9.9	4.4	
New Hampshire.....	430,972	9,385	52	12.1	5.5	18	4.2	1.9	34	7.9	3.6	
Pennsylvania.....	7,693,896	202,643	1,441	18.7	7.1	656	8.5	3.2	785	10.2	3.9	
Rhode Island.....	545,282	13,439	82	15.0	6.1	37	5.0	2.0	55	10.1	4.1	
Vermont.....	356,216	7,351	61	17.1	8.3	22	6.2	3.0	39	10.9	4.8	
New York City.....	4,799,639	129,355	802	16.7	6.2	376	7.8	2.9	426	8.9	3.3	
Washington, D. C.....	332,173	7,016	70	21.1	10.0	40	12.0	5.7	30	9.0	4.3	
Principal cities in foregoing States.....	4,182,448	109,755	744	17.8	6.8	357	8.5	3.3	387	9.3	3.5	
Bridgeport.....	102,709	2,976	15	14.6	5.0	6	5.8	2.0	9	8.8	3.0	
New Haven.....	134,145	3,772	19	14.2	5.0	10	7.5	2.7	9	6.7	2.4	
Boston.....	673,744	17,758	94	14.0	5.3	38	5.6	2.1	56	8.3	3.2	
Fall River.....	119,894	4,591	15	12.5	3.3	6	5.0	1.3	9	7.5	2.0	
Lowell.....	106,761	2,631	8	7.5	3.0	1	.9	.4	7	6.6	2.7	
Worcester.....	146,736	3,921	20	13.6	5.1	12	8.2	3.1	8	5.5	2.0	
Detroit.....	470,118	11,960	97	20.6	8.1	48	10.2	4.0	49	10.4	4.1	
Grand Rapids.....	113,168	2,693	20	17.7	7.4	6	4.4	1.9	15	13.3	5.6	
Philadelphia.....	1,554,895	38,667	290	18.7	7.5	147	9.1	3.7	148	9.5	3.8	
Pittsburgh.....	535,384	15,059	120	22.4	8.0	71	13.3	4.7	49	9.2	3.3	
Providence.....	225,424	5,727	46	20.4	8.0	18	8.0	3.1	28	12.4	4.9	

¹ As established by United States Bureau of the Census. See Mortality Statistics, 1911.

TABLE VII.—*Death rates per 100,000 population in the death-registration area from certain important causes of death, 1890 and 1900 to 1913.*

Year. ¹	Death rate per 100,000 population from—										
	Ty-phoid fever.	Diph-theria and croup.	Meas-les.	Whoop-ing cough.	Scar-let fever.	Tuber-culosis (all forms).	Pneu-monia (all forms).	Diar-rhea and enter-itis (under 2 yrs.).	Diseases caused by pregnancy and confinement.		
									Total.	Puer-peral septi-cemia.	All other.
1890 ²	46.3	97.8	13.5	15.8	13.6	252.0	186.9	139.1	15.3	^a 7.0	8.8
1900 ²	33.8	45.2	13.2	12.7	11.6	190.9	192.0	97.5	13.1	^b 5.6	7.5
1900.....	35.9	43.3	12.5	12.1	10.2	201.9	180.5	108.8	13.3	5.7	7.6
1901.....	32.3	34.0	7.3	9.7	13.1	196.9	161.4	90.9	13.7	6.0	7.7
1902.....	34.3	30.8	9.5	12.0	12.6	184.5	155.7	84.0	13.0	5.7	7.3
1903.....	34.1	31.7	9.8	15.8	12.2	188.5	155.1	81.6	14.0	6.1	7.9
1904.....	31.7	28.3	11.0	6.5	10.8	200.7	171.4	90.9	15.3	6.9	8.5
1905.....	27.8	23.6	7.5	10.6	6.7	192.3	148.8	97.0	14.9	6.8	8.1
1906.....	31.3	25.7	12.1	15.1	7.7	180.2	145.5	101.4	15.1	6.2	8.9
1907.....	29.5	23.6	10.0	11.3	10.0	178.5	156.5	96.6	15.6	6.8	8.9
1908.....	24.3	21.5	9.9	10.6	11.9	167.6	130.9	95.2	15.7	7.0	8.7
1909.....	21.1	20.4	9.6	9.6	11.4	160.8	137.6	87.8	15.3	6.7	8.6
1910.....	23.5	21.4	12.3	11.4	11.6	160.3	147.7	100.8	15.7	7.2	8.5
1911.....	21.0	18.9	10.0	11.3	8.8	158.9	133.7	77.4	16.0	7.4	8.6
1912.....	16.5	18.2	7.0	9.3	6.7	149.5	132.3	70.3	15.0	6.5	8.5
1913.....	17.9	18.8	12.8	10.0	8.7	147.6	132.4	75.2	15.8	7.2	8.6

¹ Calendar year, unless otherwise specified.² Census year ending May 31.³ Figures for puerperal septicemia for the census years 1890 and 1900 not comparable with those for later years. See p. 41.TABLE VIII.—*Deaths and death rates per 100,000 population in cities of at least 8,000¹ population and in smaller cities and rural districts in the death-registration States from diseases caused by pregnancy and confinement, 1900 to 1913.*

Year.	Deaths from diseases caused by pregnancy and confinement.									
	Number.						Rate per 100,000 population.			
	Total.		Puerperal septicemia.		All other.		Total.	Puerperal septicemia.	All other.	
	Cities of at least 8,000 population.	Cities of less than 8,000 population and rural districts.	Cities of at least 8,000 population.	Cities of less than 8,000 population and rural districts.	Cities of at least 8,000 population.	Cities of less than 8,000 population and rural districts.	Cities of at least 8,000 population.	Cities of less than 8,000 population and rural districts.	Cities of at least 8,000 population.	Cities of less than 8,000 population and rural districts.
1900.....	1,595	1,087	713	442	882	645	14.9	11.7	6.7	4.8
1901.....	1,607	1,097	661	463	946	634	14.4	12.0	5.9	5.1
1902.....	1,575	1,051	710	382	865	669	13.7	11.5	6.2	4.2
1903.....	1,659	1,119	715	438	944	681	14.1	12.1	6.1	4.7
1904.....	1,968	1,248	892	511	1,076	737	16.4	13.4	7.4	5.5
1905.....	2,069	1,150	937	464	1,132	686	16.8	12.3	7.6	5.0
1906.....	3,060	2,063	1,308	761	1,752	1,302	16.8	13.2	7.2	4.9
1907.....	3,245	2,145	1,427	821	1,818	1,324	17.3	13.5	7.6	5.2
1908.....	3,384	2,654	1,532	1,085	1,852	1,569	16.6	14.5	7.5	5.9
1909.....	3,734	2,936	1,678	1,212	2,056	1,724	16.2	13.8	7.3	5.7
1910.....	4,271	3,123	2,029	1,305	2,242	1,818	17.0	13.8	8.1	5.8
1911.....	4,543	3,925	2,202	1,678	2,341	2,248	16.5	14.6	8.0	6.2
1912.....	4,463	3,551	1,997	1,417	2,466	2,134	15.9	13.1	7.1	5.2
1913.....	5,031	4,013	2,353	1,717	2,678	2,296	17.2	13.8	8.0	5.9

¹ For the years 1900 to 1909, inclusive, basis of division was 8,000 according to the census of 1900; for the years 1910 to 1913, inclusive, basis of division was 10,000 according to the census of 1910.

MATERNAL MORTALITY.

TABLE IX.—*Death rates per 100,000 population in cities that had at least 200,000 population in 1900, and were within the death-registration States of 1900, from diseases caused by pregnancy and confinement, 1900 to 1913.*

Year.	Boston.	Buffalo.	Detroit.	Jersey City.	New York.	Newark.	Washington.
1900.....	18.5	9.1	24.7	15.9	19.3	12.6	15.4
1901.....	13.4	15.3	19.5	16.0	17.7	14.8	21.6
1902.....	14.7	12.5	15.7	16.4	16.4	16.8	15.2
1903.....	17.4	18.1	15.0	12.0	15.7	9.7	15.0
1904.....	15.8	16.0	16.3	17.3	19.0	14.6	17.6
1905.....	14.1	12.9	16.7	17.6	20.3	16.3	17.7
1906.....	15.0	20.4	15.7	18.4	18.3	18.1	17.0
1907.....	15.9	19.8	17.1	11.6	18.9	16.9	16.8
1908.....	12.1	16.1	18.5	24.2	17.1	20.0	17.7
1909.....	20.7	13.4	14.6	15.6	16.3	19.7	17.1
1910.....	14.0	12.5	20.6	17.1	16.7	18.0	21.1
1911.....	19.4	10.2	21.6	21.8	15.8	19.8	16.9
1912.....	17.9	13.0	17.7	18.1	14.8	20.6	14.0
1913.....	20.6	13.9	26.5	18.1	14.1	23.2	18.1

TABLE X.—*Death rates per 100,000 population in the 11 States within the death-registration area in 1900 from diseases caused by pregnancy and confinement, 1900 to 1913.*

Year.	Death rate per 100,000 population from diseases caused by pregnancy and confinement.											
	Connecticut.			District of Columbia.			Indiana.			Maine.		
	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.
1900.....	13.0	5.7	7.3	15.4	5.4	10.0	10.4	4.8	5.6	9.4	3.0	6.3
1901.....	11.9	4.4	7.5	23.6	10.5	13.0	10.2	5.0	5.2	11.0	4.1	6.9
1902.....	13.4	5.0	8.4	15.2	5.9	9.3	9.0	3.8	5.2	15.2	6.1	9.1
1903.....	13.2	4.4	8.7	18.0	9.2	8.8	10.5	5.4	5.1	12.1	3.9	9.2
1904.....	13.2	4.8	8.4	17.6	8.0	9.7	12.3	5.8	6.4	12.7	5.3	7.4
1905.....	15.0	5.7	9.3	17.7	6.2	11.5	12.3	6.5	5.7	11.7	5.1	6.5
1906.....	13.6	5.4	8.2	17.0	7.7	9.3	11.2	4.8	6.3	10.1	2.3	7.7
1907.....	13.4	6.4	7.0	16.8	7.3	9.5	12.3	7.1	6.3	10.8	4.3	6.6
1908.....	11.7	4.3	7.4	17.7	4.7	13.1	13.2	6.1	7.0	11.2	4.1	7.1
1909.....	13.1	4.1	9.0	17.1	7.6	9.5	14.5	7.2	7.3	10.6	4.6	6.0
1910.....	13.2	5.8	7.4	21.1	12.0	9.0	16.6	8.8	7.8	14.8	6.2	8.6
1911.....	11.3	5.0	6.3	16.9	7.4	9.5	17.7	10.9	6.8	13.4	3.9	9.5
1912.....	15.2	5.3	9.9	14.0	4.4	9.6	16.6	8.7	7.8	10.1	2.8	7.3
1913.....	12.1	4.7	7.4	18.1	6.9	11.2	16.1	8.0	7.2	11.3	3.7	7.7
Annual average, 1900 to 1913.....	13.1	5.1	8.0	17.6	7.4	10.2	13.1	6.7	6.4	11.8	4.2	7.6

TABLE X.—*Death rates per 100,000 population in the 11 States within the death-registration area in 1900 from diseases caused by pregnancy and confinement, 1900 to 1913—Continued.*

Year.	Death rate per 100,000 population from diseases caused by pregnancy and confinement—Continued.											
	Massachusetts.			Michigan.			New Hampshire.			New Jersey.		
	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.
1900.....	11.1	3.7	7.4	18.5	8.8	9.7	8.0	2.4	5.6	12.8	4.9	7.9
1901.....	9.4	3.2	6.2	19.0	9.1	9.9	7.0	3.1	3.9	9.9	3.8	6.1
1902.....	9.5	3.1	6.4	18.1	7.7	10.4	6.7	2.6	4.1	11.0	4.8	6.2
1903.....	11.7	4.0	7.7	16.7	7.4	9.3	10.5	3.8	6.7	11.5	4.6	6.9
1904.....	13.3	4.5	8.8	19.8	8.6	11.2	9.1	3.3	5.7	12.7	6.3	6.4
1905.....	11.9	4.0	7.9	14.8	6.2	8.6	12.6	3.3	9.3	13.3	6.2	7.0
1906.....	12.5	3.9	8.5	16.3	6.4	9.9	14.9	5.0	9.9	14.6	6.2	8.3
1907.....	12.8	4.3	8.4	15.7	6.4	9.3	10.6	3.1	7.5	13.1	5.2	7.8
1908.....	11.0	4.0	6.9	16.9	6.9	10.0	10.1	2.3	7.7	14.5	7.1	7.5
1909.....	14.6	5.1	9.4	15.0	6.9	8.2	13.1	4.4	8.6	12.7	5.7	7.0
1910.....	12.2	4.9	7.3	16.8	7.0	9.9	12.1	4.2	7.9	15.5	7.5	8.1
1911.....	14.8	6.1	8.7	17.5	8.5	9.0	13.6	4.2	9.5	16.1	7.7	8.4
1912.....	13.1	5.3	7.8	14.7	6.2	8.5	15.2	5.1	10.1	15.2	6.1	9.2
1913.....	14.4	5.3	9.1	19.7	9.3	10.4	13.5	4.1	9.4	16.2	7.8	8.4
Annual average, 1900 to 1913.....	12.4	4.4	7.9	17.1	7.5	9.6	11.2	3.7	7.6	13.7	6.1	7.6

Year.	New York.			Rhode Island.			Vermont.		
	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.	Total.	Puer-peral septi-cemia.	All other.
1900.....	14.1	6.5	7.6	20.8	8.4	12.4	13.4	4.9	8.4
1901.....	15.1	6.2	8.9	18.9	6.8	12.1	9.6	2.9	6.7
1902.....	13.7	6.0	7.7	15.8	7.1	8.7	11.3	3.8	7.5
1903.....	14.0	6.0	8.0	13.5	5.9	7.6	14.7	3.5	11.2
1904.....	16.0	7.3	8.7	20.6	10.6	10.0	16.9	5.4	11.5
1905.....	16.9	7.8	9.1	20.8	8.9	11.8	18.9	4.3	14.6
1906.....	15.9	7.0	9.0	17.8	6.9	10.9	15.9	4.0	12.0
1907.....	17.1	7.7	9.4	19.5	8.1	11.4	27.0	7.1	19.9
1908.....	15.7	7.2	8.5	16.7	6.0	10.8	18.9	6.2	12.7
1909.....	14.9	6.3	8.7	15.4	7.3	8.1	18.9	9.0	9.9
1910.....	15.1	6.7	8.4	15.0	5.0	10.1	17.1	6.2	10.9
1911.....	15.0	6.6	8.4	15.9	5.2	10.8	13.7	4.5	9.2
1912.....	13.5	6.0	7.6	14.1	5.1	9.0	13.7	2.2	11.4
1913.....	14.0	6.2	7.8	12.6	4.0	8.6	15.3	4.7	10.6
Annual average, 1900 to 1913.....	15.1	6.7	8.4	16.8	6.7	10.1	16.1	4.9	11.2

TABLE XI.—Deaths and death rates per 100,000 population in the death-registration area from diseases caused by pregnancy and confinement, by color of decedent, 1910 to 1913.

Year.	Deaths from diseases caused by pregnancy and confinement.											
	Number.						Rate per 100,000 population.					
	Total.		Puerperal septicaemia.		All other.		Total.		Puerperal septicaemia.		All other.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
1910.....	7,902	553	3,609	283	4,293	270	15.3	26.6	7.0	13.1	8.3	12.5
1911.....	8,783	673	4,038	338	4,745	335	15.5	26.8	7.1	13.5	8.4	12.3
1912.....	8,365	670	3,580	325	4,785	345	14.5	26.0	6.2	12.6	8.3	12.4
1913.....	9,167	843	4,170	372	4,997	471	15.2	26.1	6.9	11.5	8.3	14.6

TABLE XII.—Average death rates per 100,000 population in certain countries from diseases caused by pregnancy and confinement, 1900 to 1910.

Country.	Death rate per 100,000 population from diseases caused by pregnancy and confinement.			Country.	Death rate per 100,000 population from diseases caused by pregnancy and confinement.		
	Total.	Puerperal septicaemia.	All other.		Total.	Puerperal septicaemia.	All other.
Sweden ¹	6.0	2.4	3.5	Japan ¹	13.3	4.5	8.8
Norway.....	8.1	4.1	3.9	Australia ²	14.1	4.7	9.4
Italy.....	8.9	3.3	5.7	Belgium ³	14.8	5.8	9.0
France ⁴	10.3	4.8	5.5	Scotland ¹	14.8	5.5	9.4
Prussia ⁵	10.4	4.7	5.8	United States ⁶	14.9	6.5	8.3
England and Wales.....	11.1	4.7	6.5	Switzerland.....	15.2	6.4	8.8
New Zealand.....	12.4	3.1	9.3	Spain ¹	19.6	12.3	7.3
Ireland ¹	12.9	4.5	8.4	Austria.....	(7)	6.6	(7)
Hungary.....	13.3	3.6	9.8				

¹ Rates based on figures for 1901 to 1910.² Rates based on figures for 1906 to 1910.³ Rates based on figures for 1903 to 1910.⁴ Rates based on figures for 1902 to 1910.⁵ Rates based on figures for 1907 to 1910.⁶ Rates based on figures for death-registration area which increased from year to year; in 1900 it comprised 40.5 per cent of the total population of the United States and in 1910, 58.3 per cent.⁷ Figures not available.

TABLE XIII.—Average death rates per 1,000 live births in certain foreign countries from diseases caused by pregnancy and confinement, 1900 to 1910.

Country.	Death rate per 1,000 live births from diseases caused by pregnancy and confinement.			Country.	Death rate per 1,000 live births from diseases caused by pregnancy and confinement.		
	Total.	Puerperal septicaemia.	All other.		Total.	Puerperal septicaemia.	All other.
Sweden ¹	2.3	0.9	1.4	France ²	5.2	2.4	2.8
Italy.....	2.7	1.0	1.7	Scotland ¹	5.2	1.9	3.3
Norway.....	2.9	1.5	1.4	Australia ⁴	5.3	1.8	3.5
Prussia ³	3.2	1.4	1.8	Ireland ⁵	5.5	1.9	3.6
Hungary.....	3.6	1.0	2.6	Switzerland.....	5.6	2.4	3.3
England and Wales.....	4.1	1.7	2.4	Spain ¹	5.7	3.6	2.1
Japan ¹	4.1	1.4	2.7	Belgium ²	5.8	2.3	3.5
New Zealand.....	4.6	1.2	3.5	Austria.....	(7)	1.9	(7)

¹ Rates based on figures for 1901 to 1910.² Rates based on figures for 1903 to 1910.³ Rates based on figures for 1906 to 1910.⁴ Rates based on figures for 1907 to 1910.⁵ Rates based on figures for 1902 to 1910.⁶ Figures not available.

TABLE XIV.—Deaths in certain countries from diseases caused by pregnancy and confinement and number and per cent of such deaths from puerperal septicemia, 1900 to 1910.

Country.	Deaths from diseases caused by pregnancy and confinement.			Country.	Deaths from diseases caused by pregnancy and confinement.		
	Total.	Puerperal septi-cemia.			Total.	Puerperal septi-cemia.	
		Num-ber.	Per cent.			Num-ber.	Per cent.
Sweden ¹	3,179	1,294	40.7	Hungary.....	29,273	7,824	26.7
Norway.....	2,032	1,041	51.2	Japan ¹	63,908	21,494	33.6
Italy.....	32,651	11,901	36.4	Australia ²	2,388	800	33.5
France ³	20,217	9,424	46.6	Belgium ²	8,588	3,392	39.5
Prussia ⁴	31,680	14,151	44.7	Scotland ¹	6,839	2,522	36.9
England and Wales.....	41,691	17,433	41.8	United States ⁵	63,969	28,176	44.0
New Zealand.....	1,190	300	25.2	Switzerland.....	5,897	2,485	42.1
Ireland ⁴	5,109	1,792	35.1	Spain ¹	37,504	23,557	62.8

¹ Figures for 1901 to 1910.² Figures for 1906 to 1910.³ Figures for 1903 to 1910.⁴ Figures for 1902 to 1910.⁵ Figures for 1907 to 1910.

* Figures for death-registration area which increased from year to year; in 1900 it comprised 40.5 per cent of the total population of the United States and in 1910, 58.3 per cent.

COMMENT ON SOURCES OF STATISTICS FOR FOREIGN COUNTRIES.

The following paragraphs present, by countries, the sources of the figures subsequent to 1910 in Table XV for foreign countries and also notes on certain of these figures which call for comment or explanation. Unless otherwise specified the figures for all countries for the years 1900 to 1910, inclusive, are taken from the *Statistique Internationale du Mouvement de la Population d'après les Registres de l'Etat Civil*, of the Bureau de la statistique générale de la France. The figures for 1900 come from the volume published in 1907; those for 1901 to 1910 from that published in 1913.

These foreign sources were used only for the figures in columns 1, 3, 4, 9, and 13, from which the figures in columns 2, 5, 6, 7, 8, 10, 11, 12, 14, 15, and 16 were computed. Blank spaces indicate that statistics were not available. Similarly, where a table begins with data for a year subsequent to 1900, it indicates that the figures for the earlier years were not available, unless otherwise noted.

Australia (p. 60).—Bureau of census and statistics. Population and vital statistics. Bulletins 29 and 30. 1911-1912.

Austria (p. 60).—Statistisches Centralcommission. Österreichisches statistisches Handbuch für die im Reichsrathe vertretenen Königreiche und Länder. Nebst einem Anhang für die gemeinsamen Angelegenheiten der österreichisch-ungarischen Monarchie. Hrg. von der statistischen Centralcommission. XXXI Jahrgang. 1911.

The statistics for Austria give the deaths from puerperal septicemia only. The figures for deaths from other diseases of pregnancy and confinement were not available.

The population for 1911 could not be secured from official publications, and was therefore estimated. In making this estimate, one-tenth of the increase from 1900 to 1910 was added to the figure for 1910.

Belgium (p. 60).—Ministère de l'intérieur et de l'instruction publique. *Annuaire statistique de la Belgique*. 1912-13.

The population is that estimated as of December 31 of each year.

Belgium classifies stillbirths as "mort-nés et autres enfants présentés sans vie."

England and Wales (p. 61).—74th-77th annual reports of the registrar general of births, deaths, and marriages in England and Wales, 1911 to 1914.

Several points should be noted in the figures for England and Wales.

I. The registrar general's reports, prior to 1911, grouped deaths from diseases of pregnancy and confinement into the two large groups "puerperal septic diseases" and "diseases of pregnancy and childbirth (not septic)," and included phlegmasia alba dolens in puerperal septic diseases. For the years 1900 to 1910 the figures used are those given by the *Statistique Internationale*. The deaths from phlegmasia alba dolens have apparently been subtracted from puerperal septic diseases and have been added to the other group, thus making the classification conform more nearly to the international nomenclature. Therefore, while the figures for "deaths from all diseases caused by pregnancy and confinement" will agree with the official English figures, those for the two other groups, prior to 1911, will not.

II. As the registrar general's report for 1914 gives a table of deaths for the years 1900 to 1914 according to the detailed list of causes of death in use prior to 1911, this table has been used as the source for the figures for England and Wales after 1910, so that the statistics after 1910 can be compared with those of earlier years.

The number of deaths from puerperal septicemia for the years after 1910 is slightly lower when the deaths are classified according to the International Classification than when they are classified according to the older method, as given in table for England and Wales. The deaths from other diseases of pregnancy and confinement are, of course, correspondingly higher. This difference can be seen from the following:

Number of deaths from puerperal septicemia.

Year.	According to the International Classification.	According to the classification in use prior to 1911.
1911.....	1,262	1,267
1912.....	1,216	1,228
1913.....	1,108	1,119
1914.....	1,365	1,373

III. The International Classification was not used in England until 1911, and deaths from puerperal nephritis and albuminuria were not distinguished as puerperal until after 1910. For England and Wales, therefore, the figures are presented for 1911 to 1914, inclusive, in two ways: (a) According to use in England prior to 1911, excluding deaths from puerperal nephritis and albuminuria; and (b) including deaths from puerperal nephritis and albuminuria.

The number of these deaths was as follows:

Deaths from puerperal nephritis and albuminuria.

Year:	
1911.....	177
1912.....	174
1913.....	221
1914.....	198

Hungary (p. 61).—Statistikai hivatal. *Magyar statisztikai evkönyv*. 1911.

The figures given for Hungary include those for Fiume and Croatia-Slavonia.

Ireland (p. 62).—51st detailed annual report of the registrar general of marriages, births, and deaths in Ireland in 1914.

I. The registrar general's reports for Ireland, up through 1914, classify deaths from diseases of pregnancy and confinement into two large groups—puerperal septic diseases and diseases of pregnancy and childbirth (not septic), and include phlegmasia alba dolens in puerperal septic diseases. This was the method used in England and Wales prior to 1911. See note on England and Wales.

In the figures for Ireland, given by the *Statistique Internationale*, apparently no correction has been made as in the case of England and Wales, but in the table here given the figures have been corrected to make them comparable with those for England and Wales and for other countries. To make this correction the deaths from phlegmasia alba dolens were subtracted from deaths from puerperal septic diseases and added to the other group. Thus while the figures for "deaths from all diseases of pregnancy and confinement" will agree with the official Irish figures and with those given in the *Statistique Internationale*, those for the other two groups will not.

II. The figures for 1900 and for 1901 are not given because in those years the registrar general's reports did not include under puerperal septic diseases either pyemia or septicemia.

Italy (p. 62).—Direzione generale della statistica. Statistica delle cause di morte. 1911-1913.

Movimento de la popolazione. 1913.

Only columns 1, 3, and 4 for 1900 to 1910 were taken from the *Statistique Internationale*. The above original Italian sources were used, as in the *Statistique Internationale* the deaths from "other diseases of pregnancy and confinement" and the deaths from "noncancerous tumors and other diseases of the female genital organs" were added together, for several years. (The figures here given were probably not available when the *Statistique Internationale* was published.)

Japan (p. 63).—Bureau de la statistique générale. Mouvement de la population de l'empire du Japon for 1911 and 1912.

The population is that estimated as of December 31 of each year.

New Zealand (p. 63).—Registrar general's office. Statistics of the Dominion of New Zealand. 1911-1914.

Norway (p. 63).—Statistiske centralbureau. Statistisk aarbok for kongeriget norge. 1914.

The population for 1911 and 1912 is that estimated as of December 31.

Scotland (p. 64).—57th-60th annual reports of the registrar general for Scotland. 1911-1914.

The registrar general's reports for Scotland prior to 1911, like those of England and Wales and Ireland, included phlegmasia alba dolens under puerperal septic diseases. As in the case of Ireland, the figures given by the *Statistique Internationale* have apparently not been corrected. However, in the table here given the figures have been corrected by the method described above in the comment on the statistics for Ireland.

Sweden (p. 65).—Statistiska centralbyrån. Statistisk årsbok för Sverige. 1915.

The population is that estimated as of December 31 of each year.

Switzerland (p. 65).—Statistisches Bureau. Statistisches Jahrbuch der Schweiz. 1914.

MATERNAL MORTALITY.

TABLE XV.—Population, births, deaths, and death rates per 100,000 population, per 1,000 births, and per 1,000 live births from diseases caused by pregnancy and confinement in certain foreign countries for specified years—Continued.

Country and year.	Population July 1 each year (estimated).	Births.			Total.				Puerperal septicæmia.				All other.				
		Total.	Live births.	Still- births.	Rate.				Rate.				Rate.				
					Number.	Per 100,000 popula- tion.	Per 1,000 births.	Per 1,000 live births.	Number.	Per 100,000 popula- tion.	Per 1,000 births.	Per 1,000 live births.	Number.	Per 100,000 popula- tion.	Per 1,000 births.	Per 1,000 live births.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Hungary—Continued.																	
1908.....	20,426,000	771,126	755,888	15,238	2,862	14.2	3.8	3.8	889	4.4	1.2	1.2	2,003	9.8	2.6	2.6	
1909.....	20,608,000	792,354	776,395	15,959	2,839	13.8	3.6	3.7	961	4.7	1.2	1.2	1,878	9.1	2.4	2.4	
1910.....	20,793,000	788,566	742,869	15,697	2,506	12.1	3.3	3.4	793	3.8	1.0	1.1	1,713	8.2	2.3	2.3	
1911.....	20,958,000	747,916	732,767	15,149	2,443	11.7	3.3	3.3	869	4.1	1.2	1.2	1,574	7.5	2.1	2.1	
Ireland.																	
1902.....	4,434,000	.....	101,863	.....	635	14.3	.....	6.2	214	4.8	.....	2.1	421	9.5	.....	4.1	
1903.....	4,415,000	.....	101,831	.....	573	13.0	.....	5.6	223	5.0	.....	2.2	351	7.9	.....	3.4	
1904.....	4,405,000	.....	103,811	.....	583	13.2	.....	5.6	206	4.7	.....	2.0	377	8.6	.....	3.6	
1905.....	4,398,000	.....	102,822	.....	573	13.0	.....	5.6	217	4.9	.....	2.1	356	8.1	.....	3.5	
1906.....	4,383,000	.....	103,536	.....	607	13.8	.....	5.9	218	5.0	.....	2.1	389	8.9	.....	3.8	
1907.....	4,373,000	.....	101,742	.....	505	11.5	.....	5.0	182	3.5	.....	1.5	353	8.1	.....	3.5	
1908.....	4,370,000	.....	102,039	.....	530	12.1	.....	5.2	178	4.1	.....	1.7	352	8.0	.....	3.4	
1909.....	4,380,000	.....	102,759	.....	561	12.8	.....	5.5	207	4.7	.....	2.0	354	8.1	.....	3.4	
1910.....	4,378,000	.....	101,963	.....	542	12.4	.....	5.3	176	4.1	.....	1.7	364	8.3	.....	3.6	
1911.....	4,384,000	.....	101,758	.....	514	11.7	.....	5.1	165	3.8	.....	1.6	349	8.0	.....	3.4	
1912.....	4,385,000	.....	101,035	.....	549	12.5	.....	5.4	187	4.3	.....	1.9	362	8.3	.....	3.6	
1913.....	4,379,000	.....	100,094	.....	527	12.0	.....	5.3	163	3.7	.....	1.6	364	8.3	.....	3.6	
1914.....	4,381,000	.....	96,806	.....	467	11.3	.....	5.0	182	4.2	.....	1.8	315	7.2	.....	3.2	
Italy.																	
1900.....	32,346,000	1,113,085	1,067,376	45,679	3,034	9.4	2.7	2.8	1,033	3.2	.9	1.0	2,001	6.2	1.8	1.9	
1901.....	32,583,000	1,104,017	1,067,763	46,254	2,767	8.5	2.5	2.6	994	3.1	.9	.9	1,773	5.4	1.6	1.7	
1902.....	32,700,000	1,141,749	1,068,074	48,675	2,607	8.6	2.5	2.6	1,037	3.2	.9	.9	1,770	5.4	1.6	1.6	
1903.....	32,840,000	1,068,797	1,042,090	46,707	2,771	8.4	2.5	2.7	1,112	3.4	1.0	1.1	1,699	5.1	1.5	1.6	
1904.....	33,016,000	1,134,552	1,085,431	49,121	2,961	9.0	2.6	2.7	1,083	3.3	1.0	1.0	1,869	5.8	1.7	1.7	

MATERNAL MORTALITY.

63

1905.	83,195,000	1,133,979	1,084,518	49,461	3,198	9.6	2.8	2.9	977	2.9	.9	.9	2,221	6.7	2.0	2.0
1906.	83,325,000	1,119,131	1,070,978	48,153	2,791	9.2	2.6	2.9	1,021	3.1	.9	1.0	1,770	6.3	1.6	1.7
1907.	83,515,000	1,110,366	1,062,333	46,023	3,074	9.2	2.8	2.9	1,147	3.4	1.0	1.1	1,927	5.7	1.7	1.8
1908.	83,827,000	1,100,278	1,051,465	43,813	3,315	9.8	2.9	2.9	1,245	3.7	1.0	1.1	2,070	6.1	1.7	1.8
1909.	84,077,000	1,106,121	1,115,831	50,260	3,137	9.2	2.7	2.8	1,242	3.6	1.1	1.1	1,885	5.6	1.6	1.7
1910.	84,377,000	1,194,747	1,144,410	50,337	2,786	8.1	2.8	2.4	1,011	2.9	.8	.9	1,775	5.2	1.5	1.6
1911.	84,622,000	1,441,095	1,083,545	47,491	2,612	7.5	2.8	2.4	1,920	2.7	.8	.8	1,683	4.9	1.5	1.6
1912.	84,873,000	1,181,553	1,133,985	47,568	2,743	7.8	2.3	2.4	899	2.6	.8	.8	1,844	5.0	1.6	1.6
1913.	85,123,000	1,166,353	1,122,452	46,871	2,811	7.9	2.4	2.5	1,037	2.9	.9	.9	1,774	5.0	1.5	1.6
Japan:																
1901.	45,437,000	1,957,080	1,501,591	155,489	6,671	14.7	4.0	4.4	1,885	4.1	1.1	1.3	4,786	10.5	2.9	3.2
1902.	46,022,000	1,668,543	1,510,895	157,708	6,556	14.2	3.9	4.3	1,885	4.3	1.1	1.3	4,573	9.9	2.7	3.0
1903.	46,723,000	1,499,816	1,480,371	153,920	6,071	13.0	3.7	4.1	2,028	4.3	1.2	1.4	4,043	8.7	2.5	2.7
1904.	47,290,000	1,357,429	1,440,371	147,068	5,742	12.2	3.6	4.0	1,810	3.8	1.1	1.3	3,932	8.3	2.6	2.7
1905.	47,678,000	1,594,932	1,482,770	142,062	6,185	13.0	3.9	4.3	1,878	3.9	1.2	1.3	4,307	9.0	2.7	3.0
1906.	48,165,000	1,394,295	1,394,295	149,731	6,237	12.9	4.0	4.5	1,915	4.0	1.2	1.4	4,322	9.1	2.8	3.1
1907.	48,520,000	1,544,026	1,614,472	158,814	6,728	13.8	3.8	4.2	2,294	4.7	1.3	1.4	4,434	9.1	2.5	2.7
1908.	49,590,000	1,525,491	1,602,815	162,676	7,091	14.3	3.9	4.3	2,570	5.2	1.4	1.5	4,521	9.1	2.5	2.7
1909.	50,254,000	1,555,426	1,693,880	161,576	6,999	12.7	3.4	3.8	2,575	5.1	1.4	1.5	3,894	7.6	2.3	2.3
1910.	50,963,000	1,712,857	1,627,352	167,352	6,228	12.2	3.3	3.6	2,556	5.0	1.4	1.5	3,672	7.2	2.1	2.1
1911.	51,435,000	1,747,903	1,853,319	165,319	5,792	12.0	3.3	3.5	2,512	4.9	1.3	1.4	3,680	7.2	1.9	2.1
1912.	52,167,000	1,797,074	1,797,074	147,545	5,770	11.1	3.1	3.3	2,357	4.5	1.3	1.4	3,413	6.5	1.8	2.0
New Zealand:																
1900.	704,000	19,546	19,546	75	75	9.8	...	3.8	24	3.1	...	1.2	51	6.7	...	2.6
1901.	778,000	20,491	20,491	90	110	11.6	...	4.4	20	2.6	...	1.0	70	9.0	...	3.4
1902.	798,000	20,655	20,655	110	110	13.8	...	5.3	25	3.1	...	1.2	85	10.7	...	4.1
1903.	820,000	21,829	21,829	128	128	15.6	...	5.9	28	3.4	...	1.3	100	12.2	...	4.6
1904.	845,000	22,766	22,766	106	106	12.6	...	4.7	21	2.5	...	.9	85	10.1	...	3.7
1905.	870,000	23,682	23,682	100	100	11.5	...	4.2	21	2.4	...	.9	79	9.1	...	3.3
1906.	895,000	24,253	24,253	94	94	10.5	...	3.9	18	2.0	...	.7	76	8.5	...	3.1
1907.	919,000	25,094	25,094	116	116	12.6	...	4.6	29	3.2	...	1.2	87	9.5	...	3.5
1908.	945,000	25,940	25,940	119	119	12.6	...	4.6	33	4.9	...	1.8	73	7.7	...	3.8
1909.	972,000	26,524	26,524	135	135	13.9	...	5.1	46	3.4	...	1.2	102	10.6	...	3.8
1910.	983,000	25,984	25,984	117	117	11.8	...	4.5	35	3.5	...	1.3	82	8.3	...	3.2
1911.	1,015,000	26,354	26,354	114	114	11.2	...	4.3	27	2.7	...	1.0	86	8.6	...	3.3
1912.	1,038,000	27,508	27,508	100	100	9.6	...	3.6	19	1.8	...	.7	81	7.8	...	2.9
1913.	1,069,000	27,985	27,985	100	100	9.4	...	3.6	29	2.7	...	1.0	71	6.6	...	2.6
1914.	1,090,000	28,338	28,338	118	118	10.8	...	4.2	35	3.2	...	1.2	83	7.6	...	2.9
Norway:																
1900.	2,200,000	67,765	66,149	1,616	184	8.4	2.7	2.8	111	5.0	1.6	1.7	73	3.3	1.1	1.1
1901.	2,235,000	67,935	66,207	1,728	219	9.8	3.2	3.3	101	4.8	1.5	1.5	118	5.3	1.7	1.8
1902.	2,265,000	66,564	65,262	1,592	207	9.2	3.1	3.2	109	4.5	1.6	1.6	98	4.3	1.5	1.5
1903.	2,265,000	66,707	66,155	1,643	205	9.1	3.1	3.1	113	5.0	1.7	1.7	92	4.1	1.4	1.4
1904.	2,274,000	65,533	63,955	1,573	196	8.8	3.0	3.1	106	4.7	1.6	1.6	93	4.1	1.4	1.5

1 Figures for Dec. 31.

MATERNAL MORTALITY.

TABLE XV.—Population, births, deaths, and death rates per 100,000 population, per 1,000 births, and per 1,000 live births from diseases caused by pregnancy and confinement in certain foreign countries for specified years—Continued.

Country and year.	Population July 1 each year (estimated).	Births.			Total.				Puerperal septemia.				All other.			
		Total.	Live births.	Still- births.	Number.	Rate.			Number.	Rate.			Number.	Rate.		
						Per 100,000 popu- lation.	Per 1,000 births.	Per 1,000 live births.		Per 100,000 popu- lation.	Per 1,000 births.	Per 1,000 live births.		Per 100,000 popu- lation.	Per 1,000 births.	Per 1,000 live births.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Norway.—Continued.																
1905	2,284,000	64,158	62,008	1,460	163	7.1	2.5	2.6	75	3.3	1.2	1.2	88	3.9	1.4	1.4
1906	2,294,000	62,743	61,316	1,427	152	6.6	2.4	2.5	78	3.4	1.2	1.3	74	3.2	1.2	1.2
1907	2,303,000	62,151	60,722	1,429	168	7.3	2.7	2.8	92	4.0	1.5	1.5	76	3.3	1.2	1.3
1908	2,318,000	62,286	60,866	1,420	183	7.9	2.9	3.0	96	4.2	1.6	1.6	85	3.7	1.4	1.4
1909	2,338,000	62,846	61,407	1,439	187	8.0	3.0	3.0	81	3.5	1.3	1.3	106	4.5	1.7	1.7
1910	2,353,000	62,860	61,461	1,429	166	7.0	2.6	2.7	77	3.3	1.2	1.3	88	3.7	1.4	1.4
1911	2,415,000	62,867	61,468	1,399	.....	.....	.....	.....	87	3.6	1.4	1.4	.....	.....	.....	.....
1912	2,439,000	62,581	61,151	1,430	.....	.....	.....	.....	90	3.7	1.4	1.5	.....	.....	.....	.....
Prussia:																
1900	34,254,000	1,275,712	1,235,719	39,993	4,074	11.9	3.2	3.3	.....	.....	.....	.....	.....	.....	.....	.....
1901	34,802,000	1,301,092	1,260,379	40,713	3,992	11.5	3.1	3.2	.....	.....	.....	.....	.....	.....	.....	.....
1902	35,366,000	1,285,914	1,255,096	40,228	4,080	11.5	3.1	3.2	.....	.....	.....	.....	.....	.....	.....	.....
1903	35,980,000	1,274,666	1,235,213	39,453	4,120	11.5	3.2	3.3	1,986	5.5	1.6	1.6	2,134	5.9	1.7	1.7
1904	36,494,000	1,304,697	1,264,534	40,163	4,386	12.0	3.4	3.5	2,108	5.8	1.6	1.7	2,292	6.3	1.8	1.8
1905	37,038,000	1,279,992	1,241,020	38,972	3,993	10.7	3.1	3.2	1,789	4.8	1.4	1.4	2,174	5.9	1.7	1.8
1906	37,628,000	1,308,912	1,266,611	39,301	3,722	9.9	2.8	2.9	1,456	3.9	1.1	1.1	2,266	6.0	1.7	1.8
1907	38,203,000	1,296,291	1,259,636	38,565	3,771	9.9	2.9	3.0	1,539	4.0	1.2	1.2	2,242	5.9	1.7	1.8
1908	38,777,000	1,308,283	1,269,399	38,884	3,869	10.1	3.0	3.1	1,744	4.5	1.3	1.4	2,165	5.6	1.6	1.7
1909	39,352,000	1,287,080	1,249,040	37,940	3,913	9.9	3.0	3.1	1,772	4.5	1.4	1.4	2,141	5.4	1.7	1.7
1910	39,926,000	1,256,613	1,219,447	37,166	3,897	9.8	3.1	3.2	1,772	4.4	1.4	1.5	2,125	5.3	1.7	1.7
Scotland:																
1901	4,479,000	132,192	132,192	.....	627	14.0	.....	4.7	280	6.3	.....	2.1	347	7.7	.....	2.6
1902	4,507,000	132,267	132,267	.....	682	15.1	.....	5.2	307	6.8	.....	2.3	375	8.3	.....	2.8
1903	4,536,000	133,528	133,528	.....	709	15.6	.....	5.3	291	6.4	.....	2.2	418	9.2	.....	3.1
1904	4,564,000	132,603	132,603	.....	615	13.5	.....	4.6	241	5.3	.....	1.8	374	8.2	.....	2.8
1905	4,592,000	131,410	131,410	.....	718	15.6	.....	5.5	243	5.4	.....	1.9	470	10.2	.....	3.6
1906	4,621,000	132,008	132,008	.....	717	15.5	.....	5.4	268	5.7	.....	2.0	454	9.8	.....	3.4
1907	4,650,000	126,840	126,840	.....	686	14.8	.....	5.3	228	4.9	.....	1.8	458	9.8	.....	3.6

MATERNAL MORTALITY.

1908.	4,679,000	131,362	676	14.4	5.1	231	4.9	1.8	445	9.5	8.2
1909.	4,708,000	128,699	699	14.8	5.4	212	4.5	1.6	487	10.8	3.8
1910.	4,737,000	124,089	710	15.0	5.7	221	4.7	1.8	489	10.3	3.9
1911.	4,761,000	121,850	699	14.7	5.7	173	3.6	1.4	526	11.1	4.3
1912.	4,741,000	122,790	675	14.2	5.5	193	4.1	1.6	482	10.2	3.9
1913.	4,728,000	120,516	708	15.0	5.9	160	3.4	1.3	548	11.6	4.9
1914.	4,747,000	123,984	746	15.7	6.0	229	4.8	1.8	517	10.9	4.2
Spain:											
1901.	18,657,000	666,262	15,603	19.7	5.5	2,116	11.7	3.3	1,496	8.0	2.3
1902.	18,755,000	688,153	3,494	18.6	5.1	2,178	11.3	3.1	1,378	7.3	2.0
1903.	18,833,000	703,568	3,771	20.0	5.4	2,362	12.5	3.4	1,409	7.5	2.0
1904.	18,931,000	687,128	3,643	20.5	5.8	2,465	13.0	3.7	1,420	7.5	2.1
1905.	19,049,000	670,661	4,115	21.6	6.0	2,715	14.3	3.9	1,400	7.3	2.0
1906.	19,147,000	666,874	3,890	20.2	5.8	2,549	12.9	3.7	1,391	7.2	2.1
1907.	19,245,000	646,374	3,930	20.4	5.9	2,549	13.2	3.9	1,381	7.2	2.1
1908.	19,343,000	674,125	3,725	19.3	5.5	2,316	12.0	3.4	1,409	7.3	2.1
1909.	19,442,000	666,551	3,643	18.7	5.5	2,280	11.7	3.4	1,363	7.0	2.1
1910.	19,540,000	682,934	3,407	17.4	5.1	2,107	10.8	3.2	1,300	6.7	2.0
Sweden:											
1901.	5,117,000	138,139	3,578	6.1	2.2	121	2.4	.9	163	3.2	1.2
1902.	5,158,000	142,948	3,628	5.9	2.2	152	2.9	1.1	180	3.1	1.2
1903.	5,210,000	137,364	3,515	5.9	2.2	146	2.8	1.0	177	3.4	1.3
1904.	5,241,000	138,982	3,532	5.5	2.1	126	2.4	.9	162	3.1	1.2
1905.	5,278,000	138,827	3,418	6.3	2.4	160	2.2	1.2	164	3.1	1.2
1906.	5,316,000	136,620	3,449	6.1	2.3	194	2.3	.9	201	3.8	1.4
1907.	5,357,000	136,783	3,537	5.9	2.3	110	2.1	.8	203	3.9	1.5
1908.	5,404,000	142,309	3,435	5.5	2.1	107	2.0	.8	188	3.5	1.3
1909.	5,438,000	142,987	3,432	6.4	2.4	113	2.1	.8	226	4.3	1.7
1910.	5,496,000	138,976	3,351	6.3	2.5	119	2.2	.9	226	4.1	1.6
1911.	5,562,000	136,335	3,358	6.4	2.6	186	2.4	1.0	218	3.9	1.6
Switzerland:											
1900.	3,302,000	94,316	3,379	15.8	5.4	193	5.8	2.0	380	10.0	3.4
1901.	3,341,000	97,685	3,607	17.5	5.8	250	7.5	2.5	336	10.1	3.3
1902.	3,385,000	96,481	3,512	14.8	5.0	196	6.8	2.0	304	9.0	3.0
1903.	3,429,000	97,119	3,266	16.2	5.7	237	6.9	2.4	317	9.2	3.3
1904.	3,472,000	96,300	3,433	17.0	6.0	267	7.4	2.5	333	9.6	3.4
1905.	3,516,000	94,653	3,404	15.7	5.6	253	7.2	2.6	308	8.5	3.0
1906.	3,560,000	95,971	3,376	13.9	5.0	191	6.4	1.9	284	8.5	3.1
1907.	3,604,000	94,808	3,188	15.3	5.7	261	7.2	2.7	282	8.1	3.0
1908.	3,647,000	96,245	3,228	15.2	5.6	237	6.2	2.4	327	9.0	3.3
1909.	3,691,000	97,266	3,184	14.7	5.6	238	6.4	2.4	306	8.3	3.3
1910.	3,735,000	96,969	3,155	13.0	4.6	182	4.9	1.9	285	7.1	2.7
1911.	3,781,000	94,189	3,013	12.3	5.3	245	6.5	2.6	267	6.8	2.7
1912.	3,831,000	95,171	2,976	12.6	5.1	218	5.7	2.3	266	6.9	2.8

TABLE XVI.—Average death rates per 100,000 population and per 1,000 live births from diseases caused by pregnancy and confinement in certain foreign countries for specified periods of years.

Country and specified period of years.	Death rate from diseases caused by pregnancy and confinement.					
	Total.		Puerperal septicæmia.		All other.	
	Per 100,000 population.	Per 1,000 live births.	Per 100,000 population.	Per 1,000 live births.	Per 100,000 population.	Per 1,000 live births.
Australia:						
Whole period	14.0	5.2	4.8	1.8	9.2	3.4
1907-1909	14.3	5.3	4.6	1.7	9.6	3.6
1910-1912	13.7	5.0	4.9	1.8	8.8	3.2
Austria:						
Whole period			6.5	1.9		
1900-1902			7.2	2.0		
1904-1907			6.2	1.8		
1908-1911			6.2	1.9		
Belgium:						
Whole period	14.7	5.9	5.8	2.3	8.8	3.6
1903-1907	15.3	5.8	5.8	2.2	9.5	3.6
1908-1912	14.1	6.0	5.9	2.5	8.3	3.5
England and Wales:						
Whole period	10.6	4.0	4.3	1.6	6.3	2.4
1900-1904	12.5	4.4	5.5	1.9	7.0	2.5
1905-1909	10.3	3.9	4.2	1.6	6.2	2.3
1910-1914 ¹	9.1	3.7	3.4	1.4	5.6	2.3
France:						
Whole period	10.3	5.2	4.8	2.4	5.5	2.8
1906-1910	10.3	5.2	4.8	2.4	5.5	2.8
Hungary:						
Whole period	12.2	3.6	3.6	1.6	8.6	2.0
1900-1903	13.7	3.6	3.2	.8	10.4	2.7
1904-1907	12.0	3.5	3.3	.9	8.7	2.6
1908-1911	12.9	3.6	4.2	1.3	8.7	2.4
Ireland:						
Whole period	12.6	5.4	4.4	1.9	8.2	3.5
1902-1905	13.5	5.8	4.9	2.1	8.6	3.7
1907-1910	12.2	5.2	4.1	1.8	8.1	3.4
1911-1914	11.9	5.2	4.0	1.7	7.9	3.5
Italy:						
Whole period	8.7	2.7	3.1	1.0	5.5	1.7
1900-1904	8.8	2.7	3.2	1.0	5.6	1.7
1905-1909	9.2	2.8	3.4	1.0	5.9	1.8
1910-1913	7.9	2.4	2.8	.9	5.1	1.5
Japan:						
Whole period	13.0	4.0	4.5	1.4	8.5	2.6
1901-1904	13.5	4.2	4.2	1.3	9.3	2.9
1905-1908	13.5	4.3	4.5	1.4	9.1	2.9
1909-1912	12.0	3.6	4.9	1.5	7.1	2.1
New Zealand:						
Whole period	11.7	4.4	3.0	1.1	8.8	3.3
1900-1904	12.7	4.8	2.9	1.1	9.8	3.7
1905-1909	12.2	4.5	3.2	1.2	9.1	3.3
1910-1914	10.5	4.0	2.8	1.1	7.8	3.0
Norway:						
Whole period	8.1	2.9	4.1	1.5	3.9	1.4
1900-1903	9.1	3.1	4.8	1.7	4.3	1.4
1904-1907	7.4	2.7	3.8	1.4	3.6	1.3
1908-1910	7.6	2.9	3.7	1.4	4.0	1.5
Prussia:						
Whole period	10.4	3.2	4.7	1.4	5.8	1.8
1903-1906	11.0	3.2	5.0	1.5	6.0	1.8
1907-1910	9.9	3.1	4.4	1.4	5.5	1.7
Scotland:						
Whole period	14.9	5.4	5.0	1.8	9.8	3.6
1901-1905	14.8	5.1	6.0	2.1	8.7	3.0
1906-1910	14.9	5.4	4.9	1.8	10.0	3.6
1911-1914	14.9	5.8	4.0	1.5	10.9	4.3
Spain:						
Whole period	19.6	5.7	12.3	3.6	7.3	2.1
1901-1905	20.1	5.7	12.6	3.6	7.5	2.1
1906-1910	19.2	5.7	12.1	3.6	7.1	2.1
Sweden:						
Whole period	6.0	2.4	2.4	1.0	3.6	1.4
1901-1904	5.8	2.2	2.7	1.0	3.2	1.3
1905-1908	6.0	2.3	2.4	.9	3.6	1.4
1909-1911	6.3	2.6	2.3	.9	4.1	1.7
Switzerland:						
Whole period	14.9	5.6	6.4	2.4	8.5	3.2
1900-1904	16.3	5.8	6.7	2.4	9.6	3.4
1905-1908	15.0	5.7	6.5	2.4	8.5	3.3
1909-1912	13.1	5.3	5.9	2.4	7.3	2.9

¹ See explanatory note on p. 58.

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, CHIEF

INFANT MORTALITY

RESULTS OF A FIELD STUDY IN MANCHESTER, N. H.
BASED ON BIRTHS IN ONE YEAR

By

BEATRICE SHEETS DUNCAN and EMMA DUKE

91

INFANT MORTALITY SERIES No. 8

Bureau Publication No. 20



WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

PUBLICATIONS OF THE CHILDREN'S BUREAU

Annual Reports:

- Third Annual Report of the Chief, Children's Bureau, to the Secretary of Labor for the fiscal year ended June 30, 1915. 30 pp. 1915.
Fourth Annual Report of the Chief, Children's Bureau, to the Secretary of Labor for the fiscal year ended June 30, 1916. 27 pp. 1916.

Care of Children Series:

- No. 1. Prenatal Care, by Mrs. Max West. 41 pp. 112-ed. 1915. Bureau publication No. 4.
No. 2. Infant Care, by Mrs. Max West. 67 pp. 1914. Bureau publication No. 5.

Dependent, Delinquent, and Delinquent Classes Series:

- No. 1. Laws Relating to Mothers' Pensions in the United States, Denmark, and New Zealand. 102 pp. 1913. Bureau publication No. 7. (Out of print. Revised edition in preparation.)
No. 2. Mental Defectives in the District of Columbia: A brief description of local conditions and the need for custodial care and training. 69 pp. 1915. Bureau publication No. 11.

Infant Mortality Series:

- No. 1. Baby-Saving Campaigns: A preliminary report on what American cities are doing to prevent infant mortality. 99 pp. 114-ed. 1914. Bureau publication No. 8. (Bureau supply exhausted. Copies may be purchased from Superintendent of Documents at 16 cents each.)
No. 2. New Zealand Society for the Health of Women and Children: An example of methods of baby-saving work in small towns and rural districts. 45 pp. 1914. Bureau publication No. 9.
No. 3. Infant Mortality: Results of a field study in Johnstown, Pa., based on births in one calendar year, by Emma Duke. 103 pp. 1915. Bureau publication No. 9.
No. 4. Infant Mortality: Montclair, N. J.: A study of infant mortality in a suburban community. 40 pp. 1915. Bureau publication No. 11.
No. 5. A Tabular Statement of Infant-Welfare Work by Public and Private Agencies in the United States, by Etta H. Goodwin. 114 pp. 1916. Bureau publication No. 16.
No. 6. Infant Mortality: Results of a field study in Manchester, N. H., based on births in one year, by Beatrice Abner Duncan and Emma Duke. 134 pp., 8 pp. illus. and map of Manchester. 1917. Bureau publication No. 20.

Industrial Series:

- No. 1. Child-Labor Legislation in the United States, by Helen L. Sumner and Ella A. Merritt. 419 pp., 2 charts. 1914. Bureau publication No. 19.
Reprints from the above are also issued, as follows:
Child-Labor Legislation in the United States: Separate No. 1. Analytical tables. 478 pp., 2 charts.
Child-Labor Legislation in the United States: Separate Nos. 2 to 14. Text of laws for each State separately.
Child-Labor Legislation in the United States: Separate No. 15. Text of Federal Child-Labor Law. 1916.
No. 2. Administration of Child-Labor Laws:
Part 1. Employment-Certificate System, Connecticut, by Helen L. Sumner and Etta H. Hawks. 40 pp., 2 charts. 1916. Bureau publication No. 14.
Part 2. Employment-Certificate System, New York, by Helen L. Sumner and Etta H. Hawks. 164 pp., 3 charts. 1917. Bureau publication No. 17.
No. 3. List of References on Child Labor. 161 pp. 1916. Bureau publication No. 18.

(Continued on third page of book.)

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

INFANT MORTALITY

RESULTS OF A FIELD STUDY IN MANCHESTER, N. H.
BASED ON BIRTHS IN ONE YEAR

By

BEATRICE SHEETS DUNCAN and EMMA DUKE

INFANT MORTALITY SERIES No. 6

Bureau Publication No. 20



WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

Harvard College Library
Aug. 30, 1917.
From
United States Government

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
25 CENTS PER COPY

CONTENTS.

Letter of transmittal	Page. 9
Introduction	11-20
Method and plan of study.....	12-16
Scope.....	12
Cooperation.....	13
Infants included and excluded.....	13
Table 1.—Births during selected year included in and excluded from study, by nationality of mother.....	13
Table 2.—Registered and unregistered births during selected year, infant deaths, infant mortality rate, and per cent of still-births and miscarriages included in and excluded from study. . .	14
Table 3.—Registered births during selected year and infant deaths excluded from study, and infant mortality rate, by nationality of mother.....	15
Verification of father's earnings.....	15
Table 4.—Infant mortality rates based upon accepted, original, and revised figures, by father's earnings.....	16
Explanation of terms.....	17
General industrial conditions.....	19-20
Industries.....	19
Conditions of employment.....	19
Part I. Analysis of findings	21-118
Infant mortality rate.....	21
Age at death.....	21-24
Table 5.—Number and per cent distribution of deaths among infants born during selected year, by specified age at death, according to nativity of mother.....	21
Table 6.—Per cent distribution of deaths in Manchester and in registration area, by specified age at death.....	22
Table 7.—Deaths among infants born during selected year, by age and cause of death.....	24
Medical cause of death.....	24-27
Gastric and intestinal diseases.....	24
Table 8.—Per cent distribution of deaths in Manchester and in registration area, by specified cause.....	25
Table 9.—Deaths among infants born during selected year, infant mortality rate, and per cent distribution of deaths, by cause of death, according to nativity of mother.....	26
Table 10.—Number and per cent distribution of deaths among infants born during selected year, by ward of residence and cause of death.....	27
Season and climate.....	27-30
Deaths, by seasons.....	27
Table 11.—Deaths among infants born during selected year, by month of occurrence and cause of death.....	28

Part I. Analysis of findings—Continued.

Season and climate—Continued.

	Page
Climate.....	29
Month of birth.....	29
Table 12.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by month of birth.....	29
Table 13.—Deaths among infants born during selected year, by age at death and month of birth.....	30
Table 14.—Deaths among infants born during selected year, by year and month of death and of birth.....	30
Stillbirths.....	31-32
Nationality of mother.....	31
Table 15.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by nationality of mother..	31
Gainful employment of mother.....	31
Table 16.—Per cent of stillbirths according to employment of mother during year before baby's birth.....	32
Sex.....	32-33
Table 17.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by sex of baby and nativity of mother.....	32
Masculinity.....	32
Table 18.—Number of male per 1,000 female births, by nativity of mother.....	33
Age of mother and order of birth.....	33-37
Age of mother.....	33
Table 19.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by age of mother at birth of child and nativity of mother.....	34
Order of birth.....	34
Table 20.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by number of child in order of birth and nativity of mother.....	35
Table 21.—Per cent distribution of births during selected year and of infant deaths, by number of child in order of birth, according to nativity of mother.....	36
Size of family.....	36
Table 22.—Number and per cent distribution of infants born during selected year, by number of child in order of birth, according to earnings of father.....	37
Attendant at birth.....	37-38
Table 23.—Number and per cent distribution of births during selected year, by attendant at birth, according to nativity of mother.....	38
Economic and industrial factors.....	38-54
Occupation of father.....	38
Table 24.—Infants born during selected year, by earnings and occupation of father.....	39
Father's earnings an index of economic status.....	40
Distribution of economic groups.....	40
Table 25.—Number and per cent distribution of births during selected year, by earnings of father, according to nativity of mother.....	42

Part I. Analysis of findings—Continued.**Economic and industrial factors—Continued.**

	Page.
Infant mortality rate, by father's earnings.....	44
Table 26.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by earnings of father and nativity of mother.....	44
Father's earnings supplemented.....	46
Total income.....	46
Table 27.—Number and per cent distribution of infants born during selected year, by total family income, according to earnings of father.....	46
Father's earnings and employment of mother.....	47
Table 28.—Number and per cent of births during selected year to mothers gainfully employed during year following baby's birth, by earnings of father and nativity of mother.....	48
Mother's earnings.....	50
Table 29.—Number and per cent distribution of births during selected year to gainfully employed mothers, by earnings of mother during year following baby's birth, according to nativity of mother.....	50
Work during year before baby's birth.....	50
Table 30.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by occupation of mother during year before baby's birth.....	50
Table 31.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by nativity of mother and her employment at home or away from home during year before baby's birth.....	51
Work during year after baby's birth.....	52
Table 32.—Live births during selected year, infant deaths, and infant mortality rate, by employment of mother at home or away from home during year following baby's birth, and baby's age when mother resumed gainful work away from home.....	52
Significance of mother's absence.....	53
Table 33.—Infants whose mothers resumed work away from home during baby's lifetime, infant deaths, and infant mortality rate, by baby's age when mother resumed gainful work.....	54
Mother's work and infant mortality in low-earnings group.....	54
Table 34.—Live births, infant deaths, and infant mortality rate for low-earnings group, by employment of mother during year following baby's birth.....	54
Nativity and nationality.....	55-62
Foreign element in city.....	55
Foreign-born mothers in this study.....	55
French Canadians.....	56
Nationality and infant mortality.....	56
Economic status and size of family.....	56
Table 35.—Average number of persons per family and number and per cent of births during selected year in families of from 1 to 4 persons and of more than 4 persons, by earnings of father and nativity of mother.....	57
Economic status of French Canadians and others.....	58
Employment of foreign-born mothers.....	58

Part I. Analysis of findings—Continued.

Nativity and nationality—Continued.

	Page
Ability to speak English.....	59
Table 36.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by ability of mother to speak English.....	59
Years in United States.....	60
Table 37.—Births during selected year to foreign-born mothers, infant deaths, infant mortality rate, and per cent of stillbirths, by length of residence of mother in United States.....	61
Table 38.—Number and per cent distribution of births during selected year to foreign-born mothers by specified length of residence of mother in United States, according to nationality..	61
Literacy.....	62
Table 39.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by literacy and nativity of mother.....	62
Conditions peculiar to French Canadians.....	62
Feeding.....	63-75
Feeding and infant mortality.....	63
Effects of feeding in each month of age.....	63
Table 40.—Infants born during selected year and surviving at beginning of specified month and deaths in first year and in specified month, by nativity of mother and type of feeding....	64
Table 41.—Infants born during selected year surviving at 3, 6, and 9 months and deaths at specified age, by type of feeding and nativity of mother.....	66
Feeding methods and nationality.....	66
Table 42.—Per cent distribution of infants of native and of French-Canadian and other foreign-born mothers, by type of feeding at and during specified periods.....	69
Feeding methods in economic groups.....	69
Table 43.—Number and per cent of infants born during selected year artificially fed at specified age, by earnings of father and nationality of mother.....	70
Effects of feeding modified by income.....	71
Table 44.—Infants born during selected year and surviving at specified time and infant deaths, by type of feeding at 3 and 6 months of age and earnings of father.....	72
Feeding methods and employment of mother.....	72
Table 45.—Number and per cent of infants born during selected year artificially fed at specified age, by nationality and employment of mother during year following baby's birth.....	73
General discussion of feeding methods.....	74
Substitutes for mother's milk.....	75
Maternal histories.....	75-87
Infant mortality rate, all pregnancies.....	76
Table 46.—Number of mothers, births resulting from all pregnancies, infant deaths, infant mortality rate, and per cent of stillbirths, by number of births per mother and nativity of mother.....	76

Part I. Analysis of findings—Continued.

Maternal histories—Continued.

	Page.
Stillbirths and miscarriages.....	77
Table 47.—Mothers reporting specified number of miscarriages, by number of pregnancies per mother and nativity of mother.....	77
Table 48.—Mothers reporting specified number of stillbirths, by number of births per mother and nativity of mother.....	78
Age at death.....	79
Table 49.—Mothers reporting specified number of infant deaths, by number of live births per mother and nativity of mother.....	79
Table 50.—Mothers reporting specified number of stillbirths and deaths of infants aged 2 weeks or less, by number of births per mother and nativity of mother.....	80
Order of pregnancy and age of mother.....	80
Table 51.—Births resulting from all pregnancies, infant deaths, infant mortality rate, and per cent of stillbirths, by order of pregnancy and age of mother.....	81
Plural births.....	83
Table 52.—Plural births resulting from all pregnancies, infant deaths, infant mortality rate, and per cent of stillbirths, by age of mother.....	83
Nationality of mother.....	83
Table 53.—Number of mothers, births resulting from all pregnan- cies, infant deaths, infant mortality rate, and per cent of still- births, by nationality of mother.....	84
Economic status.....	84
Table 54.—Number of mothers, births resulting from all pregnan- cies, infant deaths, infant mortality rate, and per cent of stillbirths, by earnings of father and nativity of mother.....	85
Size of family and infant mortality.....	85
Table 55.—Number of mothers, live births resulting from all pregnancies, and infant mortality rate, by specified number of births per mother.....	86
Large families and nationality.....	86
Table 56.—Average number of births per mother and number and per cent distribution of mothers, by specified number of births, according to nationality.....	86
General discussion of maternal histories.....	87
Illustrative cases.....	87
Table 57.—Mothers married specified number of years, by number of births per mother, infant survivals, infant deaths, and stillbirths....	101
Illegitimacy.....	108
Environment.....	108
Housing.....	109-115
Sanitary condition of baby's home.....	109
Table 58.—Number of dwellings occupied by native and foreign- born mothers, by sanitary condition of dwelling.....	110
Street and alley frontage.....	110
Table 59.—Births during selected year, infant deaths, infant mor- tality rate, and per cent of stillbirths, by location of dwelling..	110
Multiple dwellings.....	111
Table 60.—Births during selected year, infant deaths, infant mor- tality rate, and per cent of stillbirths, by number of dwellings per building.....	111

Part I. Analysis of findings—Continued.

	Page
Housing—Continued.	
Room congestion.....	112
Table 61.—Births during selected year, by number of rooms and persons per dwelling and by nativity of mother	112
Table 62.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by number of persons per room and nativity of mother.....	113
Rent.....	114
Table 63.—Live births during selected year, infant deaths, and infant mortality rate, by tenure of home and nativity of mother..	115
Wards.....	116
Table 64.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by ward of residence....	117
Table 65.—Births during selected year, by ward of residence and nationality of mother.....	117
Conclusions.....	117-118
Infant mortality rate.....	117
Environment.....	117
Low earnings.....	118
Mother's employment.....	118
Nationality.....	118
Large families.....	118
Artificial feeding.....	118
Part II. Civic activities and conditions.....	119-124
Organization of infant-welfare work	119
Birth registration.....	120
Philanthropic institutions and agencies.....	120-122
Private relief.....	121
Public relief.....	121
Public care and protection of infants.....	122
Education.....	123
Public health and sanitation.....	123-130
Administration.....	123
Milk supply.....	124
Water supply.....	127
Streets.....	127
Sewerage.....	128
Garbage and refuse collection.....	129
Housing.....	130
Schedule used in investigation.....	134
Illustrations	Follow 134
Map of Manchester	Follows illus.

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, November 4, 1916.

SIR: I transmit herewith a study of infant mortality in the city of Manchester, N. H., for one year, being the third item in the field inquiry begun by the study of infant mortality in Johnstown, Pa.

Manchester was selected because of its high infant mortality rate, according to the United States census figures (1910), because it is within the birth-registration area, and because certain of its industrial characteristics are in marked contrast with those of Johnstown.

The field work was directed and the preparation of the statistical material was supervised by Miss Emma Duke, now in charge of the bureau's statistical division. The text was prepared principally by Mrs. Beatrice Sheets Duncan, who, however, resigned from the bureau before the completion of the report. The final revision was made by Miss Duke and Mr. Howard C. Jenness. A supplementary field study of father's earnings was in charge of Miss Marie Kasten.

An unusually large number of field agents and statistical clerks shared in the work of this report because it was made during a transition period—while the civil-service examinations for the enlarged staff were pending—and it was necessary to secure a considerable number of temporary assistants. I regret that it is therefore impracticable to mention all those in the office and in the field who have assisted in this study.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

Hon. WILLIAM B. WILSON,
Secretary of Labor.



INFANT MORTALITY, MANCHESTER, N. H.

INTRODUCTION.

Manchester, N. H., was the second city selected by the Children's Bureau for a field inquiry into infant mortality in its series of community studies upon this subject. The first study was made in Johnstown, Pa., a steel-mill city containing a large foreign population. A second report upon infant mortality, however, has been published by the bureau, namely, that for Montclair, N. J., a suburban residence community, where the investigation itself was conducted by the city authorities and the results presented by them to the Children's Bureau for analysis.

Manchester was chosen for several reasons: It had an unusually high infant mortality rate, it was within the registration area for births and deaths so that records for those were available, and it presented conditions which usually are associated with high infant mortality—namely, a large foreign population and a considerable proportion of industrially employed women.

Because of incomplete registration of births and deaths infant mortality rates are not available for all cities in the United States, but only for those cities in which such registration is considered to be 90 per cent complete. Of such cities, according to the table, only two, Holyoke and Lowell, have higher infant mortality rates than Manchester, and the high rate in Holyoke is perhaps due in part to the presence there of a large infant asylum which receives infants born in other cities.

For the registration States,¹ which in 1910 comprised 58.3 per cent of the population and 33.6 per cent of the land area of the United States, the infant mortality rate for 1910 was 124, as computed by the Bureau of the Census. In other words, for every eight births there was one infant death.

Behind a general rate, however, are variations not only among different communities but, more markedly, among different groups within the same community; and to trace, if possible, these variations between and within communities and to learn in detail the conditions under which babies live and die is the purpose of the series of studies to which the present report is a contribution.

¹ The registration States are those in which the registration of deaths is considered by the Bureau of the Census to be at least 90 per cent complete.

In 1,643 instances complete schedules were secured and used as the basis of this study. Of these, 79 were for stillborn infants. Among the 1,564 live-born infants occurred 258 infant deaths, a mortality rate of 165. This rate is not offered as an accurate one for the city nor as one to be used in comparison with the rates for other cities, but rather as a rate accurate for the sample group of babies selected for detailed study.

The precise infant mortality rate for the city as a whole can not be computed, because the exact number of births and of deaths during the 12 months is not known. We know that in addition to the 509 excluded cases of babies whose births were registered, other babies were born in the selected period whose births were not registered. Agents found 95 such babies chiefly through the death certificates, but no attempt was made to find all surviving unregistered births. Hence to compute a rate for unregistered births, learned of principally through death certificates, is obviously unsound; in fact, such a rate would be over 800.

Practically all infant deaths in Manchester were recorded, but the number of the excluded babies who may have died outside the city is unknown; therefore a rate based upon those who were born in Manchester and moved away in their first year would be too low.

By using all available data (that is, not only the births included in the study but also the 509 registered and the 95 unregistered births excluded from the study), incomplete as they are, for computing a rate, we find an infant mortality rate of 188.7. This rate is undoubtedly too high, for, as we have seen, no canvass was made to find all babies whose births were not registered. If all babies had been located and included in the study the true rate for the city would lie in all probability somewhere between the two rates, 165 and 188.7.

	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths and miscarriages. ¹	
		Total.	Infant deaths.		Number.	Per cent.
			Number.	Infant mortality rate.		
Total.....	2,247	2,114	309	188.7	133	5.9
Included in detailed study, registered.....	1,643	1,564	258	165.0	79	4.8
Excluded from detailed study.....	604	550	141	266.4	54	8.9
Registered.....	509	471	77	163.5	38	7.5
Unregistered.....	95	79	64	810.1	16	16.6

¹ Dead issues of less than 7 months' gestation were not included in the detailed study.

A classification by mother's nationality of registered births that were excluded from tabulation shows the number of such births to foreign-born and to native mothers.

TABLE 3.

Nationality of mother.	Registered births during selected year and infant deaths excluded from detailed study.				
	Total births.	Live births.			Still-births and miscarriages.
		Total.	Infant deaths.		
			Number.	Infant mortality rate. ¹	
All mothers.....	509	471	77	163.5	38
Native.....	149	135	21	155.6	14
Foreign-born.....	360	336	56	166.7	24
Canadian, French.....	170	155	29	187.1	18
Canadian, except French.....	14	13	1	.....	1
Polish.....	86	83	13	.....	3
English, Irish, Scotch.....	23	22	7	.....	1
Greek and Syrian.....	32	30	5	.....	2
German.....	1	1	.....	.....	.....
Jewish.....	1	1	.....	.....	.....
Ruthenian and Lithuanian.....	6	6	.....	.....	.....
All other.....	27	25	1	.....	2

¹ Not shown where base is less than 100.

Verification of father's earnings.—Information concerning father's earnings was originally obtained from the mother, but when the schedules had all been completed and turned in to the office a question arose as to whether or not mothers generally are able to give reasonably accurate statements concerning their husbands' earnings. It was decided, therefore, to check or verify the mothers' answers and, accordingly, eight months after the original data were secured, agents were sent to Manchester for this purpose.

Employers gave generous assistance in this work, and the agents of the bureau had free access to the pay rolls. Because of similarity of names, identification was sometimes difficult; and on account of shifts from one job to another in the same establishment, or from one establishment to another, it was not always possible to secure from pay rolls the earnings of a given man for the entire year.

When the pay-roll record was not complete for the entire year, the agents supplemented the information thus secured by interviews with fathers. Sometimes the fathers found it difficult to remember the earnings for a definite year, namely, that which followed the birth of the baby whose history was being studied, particularly when that was two or more years prior to the time of the interview.

In view of these chances of error, each record secured by the verifiers was carefully studied in connection with the original returns, and that which bore evidence of greater accuracy was accepted.

Where the evidence seemed to afford no basis for choice, preference was given the verifiers' returns.

Averaging the results, it was unexpectedly found that on the whole the complete statements secured from pay rolls and in interviews with employers and fathers were lower than those previously obtained from mothers. As a result of the test it was decided that the deviations were unimportant, and confidence in the mothers' statements of earnings was strengthened.

When infant mortality rates were computed according to father's earnings on the bases of the original, the revised, and the accepted figures, there was found to be little difference in trend in the three sets of figures. The following table and the diagram on the next page indicate the amount of this variation:

TABLE 4. Father's earnings.	Infant mortality rates based upon—		
	Accepted figures.	Original figures.	Revised figures.
Under \$494.....	261.1	241.0	262.4
\$494 to \$571.....	172.2	194.9	145.7
\$572 to \$675.....	186.3	198.2	191.7
\$676 to \$883.....	151.1	158.9	145.7
\$884 to \$1,091.....	143.9	152.5	146.2
\$1,092 and over.....	58.8	94.9	53.2

It will be noticed that the limits of the earnings groups of the diagram differ radically from those of the tables in the body of this report. The limits in the diagram were those originally chosen; the change in this report was the result of a deliberate attempt to secure greater accuracy in results, because a close examination of the individual reports disclosed a marked tendency to concentration of earnings on the even hundreds and on those sums which were multiples of a certain weekly wage. Obviously, of those reporting round numbers, or sums that were multiples of 52, some probably earned more or less than those amounts. Many reported earning a definite weekly wage for the whole year, when in many instances records showed that they had earned less on account of unemployment or more because they had supplemented these earnings by extra work.

The limits of the earnings groups were changed, therefore, so that as far as possible those points of concentration might fall well within the various groups rather than near the upper or lower limit of any group. With the limits of a group fixed at \$550 to \$649, a father reported as earning \$600 who may have earned \$50 more or less would fall still within the proper group; or a father earning \$12 per week who might have suffered six weeks of idleness would be correctly classified so far as the earnings group was concerned.

EXPLANATION OF TERMS.

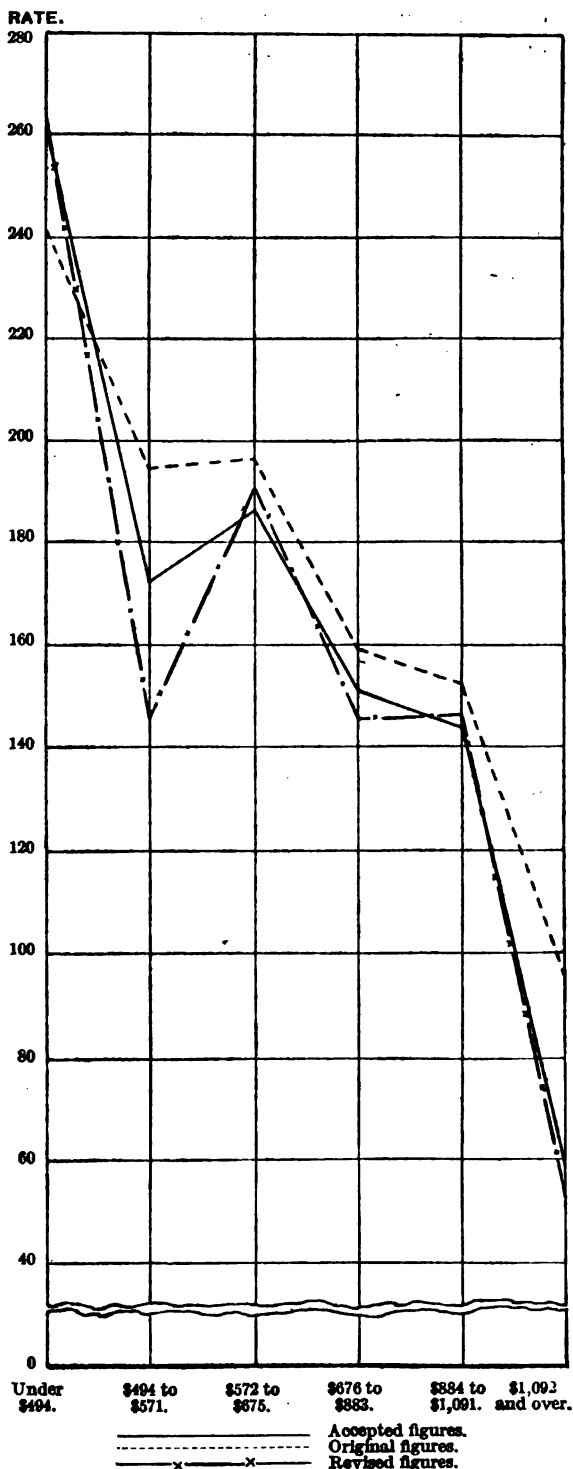
Lack of uniformity in the definitions of such terms as infant, birth, live birth, still-birth, miscarriage, etc., makes it essential that the meanings assigned these words in this report be explained.

There are no standard definitions for these terms which are uniformly used by medical or legal authorities or vital statisticians and given the same meaning by the general public in various localities. It is generally understood that a child is born dead when it shows no signs of life at birth, but there have been various legal decisions as to what physiological function or functions are to be regarded as signs of life.

In this report the statements of the attending physician on these points as well as upon all medical matters are accepted, and any child recorded as live-born or dead-born by the attending physician has been reported accordingly.

Stillbirth has been applied to all dead-

DIAGRAM 1.—INFANT MORTALITY RATES BY FATHER'S EARNINGS, DERIVED FROM ACCEPTED FIGURES, ORIGINAL FIGURES, AND REVISED FIGURES.



born issues of pregnancy which resulted from seven or more calendar months' gestation; and the term miscarriage to all dead-born issues which have resulted from less than seven calendar months' gestation.

The following are brief explanations of the meanings assigned to some of the expressions used in the text and tables of this report:

Selected year. Year ended October 31, 1913.

Infant. Child under 1 year of age.

Live birth. Infant reported by attending physician as born alive.

Stillbirth. Product of pregnancy expelled after seven or more months' gestation and reported by attending physician as born dead.

Total births. Sum of live births and stillbirths. Miscarriages are excluded.

Miscarriage. Product of pregnancy expelled during first seven months of pregnancy and reported by attending physician as born dead.

Infant death. Death of an infant under 1-year of age.

Infant mortality rate. The number of infant deaths per 1,000 live births during selected year.

All pregnancies. Miscarriages are excluded unless the contrary is indicated by a note.

Maternal records. Statistics on maternal records are based upon complete pregnancy records furnished by married mothers. Whenever the mother had borne children before her marriage, or whenever she had not been able to state positively the age at death of her various children, or the information was in any way incomplete, her record was not included.

Ward of residence. The ward in which live-born infants spent the greater part of their life and in which stillborn infants' mothers spent the greater part of their pregnancy. This was not necessarily the ward in which the birth or death occurred.

Housing. Information as to congestion, house defects, rent, etc., was secured for the house in which the baby spent the greater part of the first year of its life.

Earnings and income. Reports were secured of the earnings and income of the family only for the year following the birth of the infant even in the case of stillborn children, and hence earnings invariably relate to that year.

Occupation of father. The occupation reported for the father is the principal one in which he was engaged in the year following the birth of the infant during the selected year.

Occupation of mother. Occupation of mother was ascertained for the year preceding and the year following the birth of the infant during the selected year.

GENERAL INDUSTRIAL CONDITIONS.

Industries.—The dominant industry of Manchester is the manufacture of textiles, particularly cotton. This industry at present employs more than three times as many people as any other and has played an important part in the city's growth and development from its very early history. As far back as 1809 cotton manufacture was started here in what was then the little village of Derryfield. The Amoskeag Falls at this point of the Merrimack River furnish the abundant water power which has been largely responsible for the development of Manchester into a textile city. In 1794 the potential value of the falls was recognized by Judge Samuel Blodgett, who undertook the project of building a dam and a canal. He predicted that the village of Derryfield some day would become "the Manchester of America,"¹ and in 1810 in honor of his memory the name was changed to Manchester.

The development of the cotton textile industry was slow until 1825, when the enterprise begun in 1809 was taken over by a new company, under whose management the business prospered. Since that period the growth of the industry has been steady. In 1831 a final incorporation under a new management took place, and the company formed then has continued up to the present time.

According to the Federal census of 1910 the total number of persons 10 years of age and over gainfully employed in Manchester was 35,000, of whom 22,743 were male and 12,257 female. There were 25,131 persons engaged in manufacturing and mechanical industries, and of these 9,126 were females.

At present two establishments in Manchester are engaged in cotton manufacture. One of these produces the coarser cotton goods—ducks, sheeting, etc. The other, in addition to the heavy and coarser products, manufactures cotton dress goods, such as gingham and prints, as well as some worsted goods. These two establishments are reported by the employers as having approximately 18,800 employees, of whom 15,500 are in one establishment. The number of women employed in the manufacture of textiles is about 8,600.

The manufacture of shoes is next in importance to that of textiles. The six largest establishments employ over 6,000 persons, many of whom are women. Women also work to a considerable extent in the manufacture of cigars.

Conditions of employment.—The conditions of employment vary in the different industries. The hours of labor prescribed for women regulate to some extent those of men in industries where both are employed, and Saturday afternoon half holiday is the custom in most of the factory occupations. The cotton operatives are relatively

¹ Manchester, a Brief Record of Its Past and a Picture of Its Present, p. 21. Maurice D. Clarke, compiler, Manchester, N. H., 1875.

unskilled and receive lower rates of wages than employees in the shoe and cigar factories. The industry offers steady employment, however, practically throughout the year, with the exception of two weeks' shutdown in the fall, and consequently the labor force contains a stable element of regular workers who have been employed for a period of years. One company encourages stability by engaging in extensive welfare work and by offering its employees assistance in building homes.

The cotton operatives are of many nationalities—French-Canadian, English, Scotch, Irish, Polish, Greek, and Syrian. The last three named are the latest arrivals and as a rule are found in the least-skilled and lowest-paid occupations. The French Canadians predominate in number.

Employment in the shoe industry has been much less regular than that in the mills. This condition, however, as well as the rate of pay, varies somewhat with the different establishments.¹

¹ Following are the more important provisions of the laws regulating the employment of women and children in force in 1914: Working hours for women and minors in manufacturing, mechanical, and mercantile establishments, laundries, restaurants, and confectionery stores, or in the employ of express or transportation companies, shall not exceed 10½ in any one day nor 55 in any one week. In the same establishments girls and women employed at night—that is, if any part of their employment on more than one day a week is between 8 p. m. and 6 a. m. of the following day—may not work more than 8 hours in any 24, nor more than 48 hours in any one week. [Acts of 1913, ch. 156. Ch. 164 of the acts of 1915 amends this act by providing for certain exemptions and by making the maximum of 10½ hours a day and 55 a week apply to any female or "minor under 18 years of age" instead of to any female or "minor."] Children under 14 are not allowed to work in a comprehensive list of employments, including work in factories and mercantile establishments, and may not work under 16 in those employments unless they have fulfilled certain educational requirements. [Acts of 1911, ch. 162, as amended by acts of 1913, ch. 221. Ch. 61 of the acts of 1915 amends this act, but makes no important change except that it permits employment during school vacation without the fulfillment of the educational requirements.]

PART I. ANALYSIS OF FINDINGS.

INFANT MORTALITY RATE.

In the detailed study of infant life and mortality in Manchester the group was composed, as we have seen, of 1,643 registered infants born during the 12-month period ended October 31, 1913. Of these, 79, or 4.8 per cent, were stillborn, and of the 1,564 live born, 258 died under 1 year of age, making an infant mortality rate of 165.

AGE AT DEATH.

The largest proportion of deaths occurred in the early period of infancy, which always makes the greatest inroads upon infant life, and especially is this true of the first few days. In the first week 46 deaths occurred, constituting 17.8 per cent of all deaths. If the same number had occurred in each succeeding week, all the babies would have been dead before the end of eight months. On the first day the percentage of deaths was higher than on any other day, and although it continued high for a number of weeks it declined progressively from the day of birth to the end of the year.

TABLE 5.

Age at death.	Deaths among infants born during selected year to—									
	All mothers.		Native mothers.		Foreign-born mothers.					
	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	French-Canadian mothers.		Other for-eign-born mothers.	
							Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.
All ages.....	258	100.0	67	100.0	191	100.0	129	100.0	62	100.0
Under 1 month.....	72	27.9	16	23.9	56	29.3	38	29.5	18	29.0
Less than 1 day.....	17	6.6	4	6.0	13	6.8	11	8.5	2	3.2
1 day but less than 2.....	6	2.3	2	3.0	4	2.1	2	1.6	2	3.2
2 days but less than 3.....	8	3.1	2	3.0	6	3.2	7	5.4	1	1.6
3 days but less than 7.....	15	5.8	2	3.0	13	6.8	8	6.2	5	8.1
1 week but less than 2.....	10	3.9	5	7.5	5	2.6	2	1.6	3	4.8
2 weeks but less than 1 month.....	16	6.2	3	4.5	13	6.8	8	6.2	5	8.1
1 month but less than 2.....	24	9.3	4	6.0	20	10.5	15	11.6	5	8.1
2 months but less than 3.....	24	9.3	4	6.0	20	10.5	10	7.8	10	16.1
3 months but less than 6.....	57	22.1	22	32.8	35	18.3	26	20.2	9	14.5
6 months but less than 9.....	49	19.0	14	20.9	35	18.3	27	20.9	8	12.9
9 months but less than 12.....	32	12.4	7	10.4	25	13.1	13	10.1	12	19.4

Deaths on the first day were 6.6 per cent of deaths under 1 year; those of the first week 17.8 per cent; of the first month 27.9 per cent. In the first three months of life there were 120 deaths, or 46.5 per cent of all infant deaths. Over twice as many babies died in the first half as in the last half of their first year, and in the last half more died in the third quarter than in the fourth.

This concentration of deaths in the early part of the first year of life is common to infant mortality elsewhere. For the registration area of the United States in 1913 the excess of deaths during the first weeks is even more marked. In this area deaths under 1 day of age formed 13.4 per cent of all infant deaths as compared with 6.6 per cent in Manchester, while deaths under 1 week were 28.4 per cent, under 1 month 43.3 per cent, and under 3 months 60.3 per cent as compared with 17.8, 27.9, and 46.5 per cent, respectively, in Manchester.

Age at death.	Per cent distribution.	
	Man- chester.	Regis- tration area. ¹
All ages	100.0	100.0
Under 1 month.....	27.9	43.3
Less than 1 day.....	6.6	13.4
1 day but less than 2.....	2.3	4.9
2 days but less than 3.....	3.1	3.4
3 days but less than 7.....	5.8	6.8
1 week but less than 2.....	3.9	6.4
2 weeks but less than 1 month.....	6.2	8.4
1 month but less than 2.....	9.3	9.4
2 months but less than 3.....	9.3	7.7
3 months but less than 6.....	22.1	17.4
6 months but less than 9.....	19.0	12.5
9 months but less than 12.....	12.4	9.9

¹ Derived from Table 8, p. 577, Mortality Statistics, 1913, Bureau of the Census, Washington, 1915.

One fact which would lead one to expect a high death rate during the first weeks and months after birth is that the hazard to life in general is greatest then; babies are weakest at birth and during early infancy. Again, a large number of deaths during these early days of infant life are due to prenatal causes, such as premature birth, congenital defects, and weakness at birth.

As one means of reducing the number of early deaths, proper prenatal care of mothers is of the utmost importance. Efforts toward this end have been made in a number of communities by hospitals, visiting nurses, health officials, and others who have attempted to make accessible to all mothers adequate medical advice and obstetrical care during pregnancy and childbirth.

The number of infant deaths during the early months does not indicate that in Manchester the whole problem of prevention of infant mortality lies among the younger babies. The death rate, though on the decline as the babies grew older, nevertheless continued sufficiently high to the end of the 12-month period to be susceptible of considerable reduction. In the group under consideration 32 deaths occurred during the last quarter of the first year of life, and even this number per quarter would have given an infant mortality rate of 81.8. Such a rate, based upon the assumption that the deaths were evenly distributed throughout the first year, would be unduly high considering that some communities have reduced their actual rate to or below that point. (See Table 7.)

The number of deaths in each month of age is shown graphically in the following diagram. From 72 in the first month the number of deaths drops sharply to 24 in the second month, and thereafter there is a general tendency for the number to decrease each month except the ninth, in which occurs a marked increase.

DIAGRAM II.—INFANT DEATHS OCCURRING IN SPECIFIED MONTH OF AGE.

NUMBER.

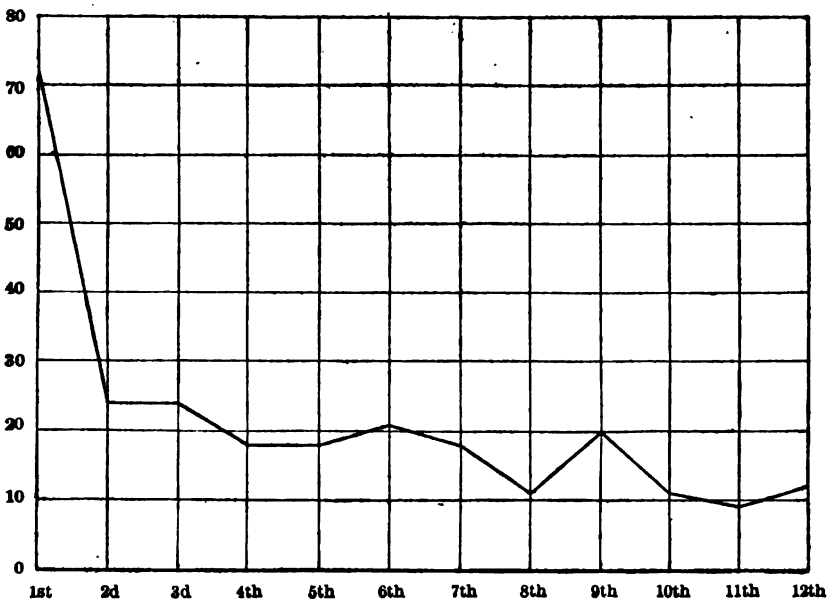


TABLE 7.

Deaths among infants born during selected year.

Cause of death.	Occurring in specified month of age.														
	Total deaths.	First.			Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth.
		Total.	Under 2 weeks.	2 weeks, but under 1 month.											
All causes.....	268	72	56	16	24	24	18	18	21	18	11	20	11	9	12
Gastric and intestinal diseases.....	99	10	4	6	9	10	11	11	10	8	7	11	6	2	4
Respiratory diseases.....	41	4	2	2	6	5	2	.....	3	5	3	2	3	3	5
Malformations.....	14	10	8	2	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....
Early infancy.....	62	38	34	4	5	2	4	4	4	2	1	1	.....	.....	1
Premature birth.....	23	23	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Congenital debility.....	28	14	10	4	5	2	4	4	4	2	1	1	.....	.....	1
Injuries at birth.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Epidemic diseases.....	5	1	.....	1	.....	.....	1	.....	.....	1	.....	1	.....	.....	1
Diseases ill defined or unknown.....	11	3	2	1	1	2	.....	1	1	1	.....	1	.....	.....	1
All other causes.....	26	6	6	.....	3	2	.....	2	3	1	.....	3	2	4	.....

MEDICAL CAUSE OF DEATH.

Infant deaths are classified by the medical cause of death, which is the immediate cause only. Back of it lie, frequently, economic and social causes. Such conditions as poverty, ignorance in the care of the baby, the work of the mother, and artificial feeding may all share in the responsibility for death.

Gastric and intestinal diseases.—The diseases of infancy most commonly fatal in Manchester were the principal diseases of the digestive tract or gastric and intestinal diseases; they were responsible for 99 deaths, or 38.4 per cent of the entire number.

The proportion of deaths from gastric and intestinal diseases in Manchester as compared with that in the registration area in 1913 is of significance in connection with the city's high infant death rate. Deaths from this class of diseases are commonly believed to be in a large degree preventable,¹ and hence attempts to reduce infant mortality frequently have been confined largely to efforts to reduce the number of deaths from these diseases. The methods commonly employed have been the improvement of the milk supply, the establishment of infant-welfare stations and of agencies which distribute pure and modified milk to mothers of young babies and give instruction to

¹ Prof. Irving Fisher, in his Report on National Vitality, prepared for the National Conservation Committee, p. 11, says: "Using the statistics, experience, and estimate of 18 physicians as to the preventability of each of the list of 90 causes of death, we find that the length of life could easily be increased from 45 to 60 * * *. The principal reduction would be from infantile diarrhea and enteritis, over 60 per cent of which could be prevented."

them, and furnish other means of disseminating information in regard to the proper care and feeding of babies. In Manchester there were three infant-welfare stations maintained by private philanthropy during the summer months.

TABLE 8.		Cause of death. ²	Infant deaths in—			
			Manchester.		Registration area, 1913.	
			Number.	Per cent distribution.	Number.	Per cent distribution.
		All causes.....	258	100.0	159,435	100.0
		Gastric and intestinal diseases ³	99	38.4	41,379	26.0
		Diseases of the stomach.....	3	1.2	2,924	1.8
		Diarrhea and enteritis.....	96	37.2	38,455	24.1
		Respiratory diseases ⁴	41	15.9	24,285	15.2
		Acute bronchitis.....	13	5.0	3,665	2.3
		Broncho-pneumonia.....	17	6.6	13,100	8.2
		Pneumonia.....	11	4.3	7,520	4.7
		Malformations.....	14	5.4	8,813	5.5
		Early infancy.....	62	24.0	52,865	33.2
		Premature birth.....	23	8.9	27,359	17.2
		Congenital debility.....	38	14.7	20,375	12.8
		Injuries at birth.....	1	.4	5,131	3.2
		Epidemic diseases ⁵	5	1.9	13,390	8.4
		Measles.....	1	.4	2,011	1.3
		Scarlet fever.....	.....	.....	255	.....
		Whooping cough.....	4	1.6	3,442	2.2
		Diphtheria and croup.....	.....	.....	913	.6
		Influenza.....	.....	.....	608	.4
		Dysentery.....	.....	.....	651	.4
		Erysipelas.....	.....	.....	756	.5
		Tetanus.....	.....	.....	369	.2
		Tuberculosis of the lungs.....	.....	.....	848	.5
		Tuberculous meningitis.....	.....	.....	1,230	.8
		Other forms of tuberculosis.....	.....	.....	413	.3
		Syphilis.....	.....	.....	1,894	1.2
		External causes.....	.....	.....	1,292	1.2
		Diseases ill defined or unknown.....	11	4.3	3,292	2.1
		All other causes.....	26	10.1	13,519	8.5
		Meningitis.....	7	4.3	1,739	1.1
		Convulsions.....	11	2.7	3,125	2.0
		Organic diseases of the heart.....	1	.4	748	.5
		Other.....	7	2.7	7,907	5.0

¹ The numbers indicate the classification in the abridged and the detailed lists, respectively, of the Manual of the International List of Causes of Death.

² The causes of death included in this list are those used by the U. S. Bureau of the Census (see Mortality Statistics, 1913, p. 577) in classifying the deaths of infants under 1 year. They are those causes of death or groups of causes which are most important at this age. The numbers of the detailed and abridged International Lists will facilitate their identification. In order to make discussion of the figures easier, these causes of death have been grouped in 8 main groups.

³ The term "gastric and intestinal diseases," as used in the tables and discussion, includes, as above shown, only the diseases of this type which are most important among infants; i. e., diseases of the stomach, diarrhea, and enteritis. It does not include all "diseases of the digestive system" as classified under this heading according to the detailed International List.

⁴ The term "respiratory diseases," as used in the tables and discussion, similarly includes only those of the respiratory diseases which are most important among infants; i. e., acute bronchitis, broncho-pneumonia, and pneumonia. It does not include all "diseases of the respiratory system" as classified under this heading according to the detailed International List.

⁵ The term "epidemic diseases," as used in the tables and discussion, includes only those of this group which are most important among infants.

TABLE 9.

Cause of death.	Deaths among infants born during selected year to—					
	All mothers.			Native mothers.		
	Number.	Infant mortality rate.	Per cent distribution.	Number.	Infant mortality rate.	Per cent distribution.
All causes.....	268	165.0	100.0	67	128.1	100.0
Gastric and intestinal diseases.....	99	63.3	38.4	29	55.4	43.1
Respiratory diseases.....	41	26.2	15.9	12	22.9	17.9
Malformations.....	14	9.0	5.4	1	1.9	1.5
Early infancy.....	63	39.6	24.0	19	36.3	28.4
Premature birth.....	23	14.7	8.9	7	13.4	10.4
Congenital debility.....	38	24.3	14.7	12	22.9	17.9
Injuries at birth.....	1	.6	.4			
Epidemic diseases.....	5	3.2	1.9	1	1.9	1.5
Diseases ill defined or unknown.....	11	7.0	4.3			
All other causes.....	26	16.6	10.1	5	9.6	7.5

Cause of death.	Deaths among infants born during selected year to foreign-born mothers.								
	Number.	Infant mortality rate.	Per cent distribution.	French-Canadian mothers.			Other foreign-born mothers.		
				Number.	Infant mortality rate.	Per cent distribution.	Number.	Infant mortality rate.	Per cent distribution.
All causes.....	191	183.5	100.0	129	224.7	100.0	62	122.8	100.0
Gastric and intestinal diseases.....	70	67.2	36.6	54	94.1	41.9	16	34.3	28.3
Respiratory diseases.....	29	27.9	15.2	18	31.4	14.0	11	23.6	17.7
Malformations.....	13	12.5	6.8	7	12.2	5.4	6	12.8	9.7
Early infancy.....	43	41.3	22.5	30	52.3	23.3	13	27.8	21.6
Premature birth.....	16	15.4	8.4	14	24.4	10.9	2	4.3	3.2
Congenital debility.....	26	25.0	13.6	15	26.1	11.6	11	23.6	17.7
Injuries at birth.....	1	1.0	.5	1	1.7	.8			
Epidemic diseases.....	4	3.8	2.1	3	5.2	2.3	1	2.1	1.6
Diseases ill defined or unknown.....	11	10.6	5.8	5	8.7	3.9	6	12.8	9.7
All other causes.....	21	20.2	11.0	12	20.9	9.3	9	19.3	14.5

A distribution of deaths by cause in the several wards shows a proportionately large number of deaths from gastric and intestinal diseases in every ward—in all but the fifth and seventh wards more than a third of all the deaths. In ward 2, in which the largest number of deaths occurs, 45.1 per cent of this number were from gastric and intestinal diseases. It would seem, therefore, that a reduction of infant mortality not only in the city as a whole but in practically every ward of the city is largely a matter of reducing the number of deaths from this one cause.

TABLE 10.

Deaths among infants born during selected year.

Cause of death.	Total.	Ward of residence.								
		1	2	3	4	5	6	7	8	9
All causes.....	258	19	51	27	34	17	22	21	19	48
Gastric and intestinal diseases.....	99	7	23	10	13	5	9	5	9	18
Respiratory diseases.....	41	.....	6	2	10	2	6	4	4	7
Malformations.....	14	2	2	1	1	1	2	2	1	2
Early infancy.....	62	8	14	7	4	6	5	5	2	11
Premature birth.....	23	3	5	2	.....	4	4	2	1	2
Congenital debility.....	38	5	8	5	4	2	1	3	1	9
Injuries at birth.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....
Epidemic diseases.....	5	.....	1	1	.....	1	.....	1	.....	1
Diseases ill defined or unknown.....	11	1	2	2	3	1	.....	1	.....	1
All other causes.....	26	1	3	4	3	1	.....	3	3	8

PER CENT DISTRIBUTION.

All causes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gastric and intestinal diseases.....	38.4	36.8	45.1	37.0	38.2	29.4	40.9	23.8	47.4	37.5
Respiratory diseases.....	15.9	.....	11.8	7.4	29.4	11.8	27.3	19.0	21.1	14.6
Malformations.....	5.4	10.5	3.9	3.7	2.9	5.9	9.1	9.5	5.3	4.2
Early infancy.....	24.0	42.1	27.5	25.9	11.8	35.3	22.7	23.8	10.5	22.9
Premature birth.....	8.9	15.8	9.8	7.4	.....	23.5	18.2	9.5	5.3	4.2
Congenital debility.....	14.7	26.8	15.7	18.5	11.8	11.8	4.5	14.3	5.3	18.8
Injuries at birth.....	.4	.....	2.0	.....	.....	.....	.....	.....	.....	.....
Epidemic diseases.....	1.9	.....	2.0	3.7	.....	5.9	.....	4.8	.....	2.1
Diseases ill defined or unknown.....	4.3	5.3	3.9	7.4	8.8	5.9	.....	4.8	.....	2.1
All other causes.....	10.1	5.3	5.9	14.8	8.8	5.9	.....	14.3	16.8	16.7

SEASON AND CLIMATE.

Deaths by seasons.—The season of the year has a close relation to the medical cause of death. The data obtained in Manchester on this point agree with observation and experience generally. The summer months are hardest for the baby on account of the greater prevalence of gastric and intestinal diseases during the warm weather. The three months showing the largest number of infant deaths were July, August, and September, with 32, 48, and 27 deaths, respectively, in each of which months a large proportion of the deaths was from gastric and intestinal causes. In August 35 deaths were from these diseases alone, more than occurred in any other month from all causes combined. May showed the next largest number of deaths, namely, 25, but no one cause predominated, and apparently climatic conditions do not explain the large number. In January and February, the coldest months in Manchester, also occurred a relatively large number of deaths, 22 and 20, respectively. Deaths from respiratory diseases occurred chiefly in these two months and in the next two, March and April, which cover the break-up of winter. The distribution by months of deaths due to other causes showed no striking grouping of significance. (See Table 11.)

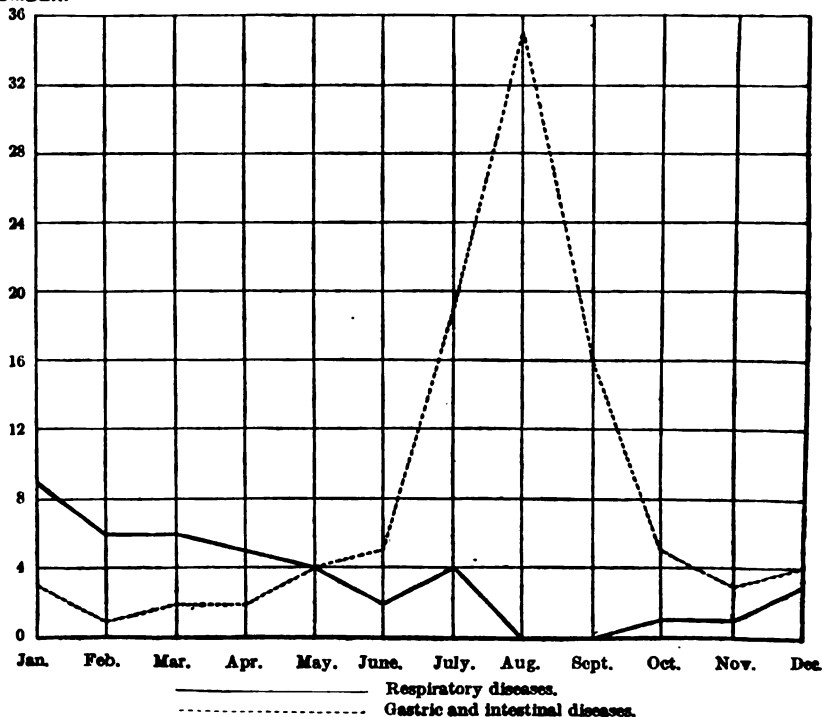
The prevalence of gastric and intestinal diseases in summer and of respiratory diseases in winter is shown graphically in Diagram III. The rapid increase in the number of deaths from gastric and intestinal diseases from June to August and the equally rapid decrease in the number from August to October are the significant points brought out.

TABLE II.

Cause of death.	Deaths among infants born during selected year.											
	Total.	Occurring in specified month.										
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.
All causes	258	22	20	15	15	25	17	32	48	27	13	9
Gastric and intestinal diseases	99	3	1	2	2	4	5	19	35	16	5	3
Respiratory diseases	41	9	6	6	5	4	2	4	.....	1	1	3
Malformations	14	1	3	1	3	.....	.....	4	.....	.....	1	1
Early infancy	62	5	5	5	1	9	8	4	8	7	3	5
Premature birth	23	1	2	1	.....	3	4	2	4	3	1	.....
Congenital debility	38	4	3	3	1	6	4	2	4	4	2	3
Injuries at birth	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Epidemic diseases	5	.....	.....	.....	1	2	.....	.....	1	1	.....	.....
Diseases ill defined or unknown	11	1	1	.....	.....	2	1	.....	3	.....	2	1
All other causes	26	3	4	1	3	4	1	1	1	3	2	1

DIAGRAM III.—INFANT DEATHS OCCURRING IN SPECIFIED MONTH, FROM GASTRIC AND INTESTINAL DISEASES AND RESPIRATORY DISEASES.

NUMBER.



Climate.—The climate of Manchester apparently offers no special disadvantage to infant life unless it be that the long, cold winters may swell the death rate from broncho-pneumonia and other respiratory diseases. The climate is somewhat more equable than that of the same latitude (40° north) farther west, and the average rainfall is greater. It is generally regarded as agreeable and healthful and the high death rate from gastric and intestinal diseases in the summer months can not be ascribed to exceptionally long, hot summers. The average temperature in 1913 at Concord, N. H., the nearest United States meteorological station, was 48° F.; the highest temperature of the year was 99° in July; the lowest, -7° in February. The records of the United States Weather Bureau were also examined to discover whether the seasonal conditions which prevailed in Manchester during the period covered by the investigation were in any way exceptional, but such was found not to be the case.

Month of birth.—Another factor to be taken into consideration in connection with the distribution of deaths by cause and season is the month of birth. The baby's age when subjected to special hazards, such as summer heat and diarrheal epidemics, makes a difference in its power of resistance. Babies born during the late summer and early fall months in Manchester appeared to have the best chance of survival. October babies made the best showing of all, with an infant mortality rate of but 90.9. August and September babies showed rates of 119.7 and 117.2, respectively. Babies born in May and June, who were very young to face the summer months, had the highest death rates, namely, 227.3 and 234, respectively. Babies born in July and August had lower death rates, perhaps because fewer of them were weaned before the end of the hot season. The numbers, however, are too small to justify any positive deductions.

TABLE 12.

Month of birth.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent.
			Number.	Infant mortality rate.		
The year.....	1,643	1,564	258	165.0	79	4.8
November, 1912.....	118	109	24	220.2	9	7.6
December, 1912.....	124	111	14	126.1	13	10.5
January, 1913.....	130	127	26	204.7	3	2.3
February, 1913.....	134	128	21	164.1	6	4.5
March, 1913.....	139	135	20	148.1	4	2.9
April, 1913.....	152	148	24	162.2	4	2.6
May, 1913.....	138	132	30	227.3	6	4.3
June, 1913.....	146	141	33	234.0	5	3.4
July, 1913.....	149	142	23	162.0	7	4.7
August, 1913.....	147	142	17	119.7	5	3.4
September, 1913.....	138	128	15	117.2	10	7.2
October, 1913.....	128	121	11	90.9	7	5.5

TABLE 13.

TABLE 13.	Deaths among infants born during selected year.												
Month of birth.	Total.	Occurring in specified month of age.											
		First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth.
The year.....	258	72	24	24	18	18	21	18	11	20	11	9	13
November, 1912.....	24	5	3	3	1	2	1	1	5	2	1	1	1
December, 1912.....	14	3	2	2	1	1	1	1	2	3	2	1	1
January, 1913.....	26	7	4	1	2	1	3	4	2	2	1	1	1
February, 1913.....	21	7	1	1	1	1	3	4	1	1	1	1	2
March, 1913.....	20	5	2	2	1	3	3	1	1	1	1	1	1
April, 1913.....	24	5	2	2	6	4	3	1	1	1	1	1	1
May, 1913.....	30	9	1	5	2	1	2	1	3	1	1	2	2
June, 1913.....	33	7	8	4	1	3	1	1	1	2	1	1	3
July, 1913.....	23	9	1	4	1	2	1	1	1	1	1	3	2
August, 1913.....	17	8	1	1	2	1	1	3	1	1	1	1	1
September, 1913.....	15	5	1	1	1	2	1	1	3	2	1	1	1
October, 1913.....	11	2	3	1	2	1	1	2	1	1	1	1	1

TABLE 14.

Month of birth.	Deaths among infants born during selected year.											
	Total.	Occurring in specified year and month.										
		1912		1913								
		Novem-ber.	Decem-ber.	Janu-ary.	Febru-ary.	March.	April.	May.	June.	July.	Aug-ust.	Sep-tem-ber.
The year.....	258	4	6	8	12	10	9	14	12	20	47	27
November, 1912.....	24	4	3	2	2	1	1	1	1	1	5	2
December, 1912.....	14	1	3	1	1	1	1	1	1	2	1	4
January, 1913.....	26	1	6	3	3	3	1	2	1	5	4	3
February, 1913.....	21	1	6	6	2	2	1	1	4	4	3	1
March, 1913.....	20	1	1	1	1	3	4	1	3	1	4	2
April, 1913.....	24	1	1	1	1	4	4	1	1	3	6	5
May, 1913.....	30	1	1	1	1	1	8	1	1	5	2	2
June, 1913.....	33	1	1	1	1	1	1	5	3	9	2	2
July, 1913.....	23	1	1	1	1	1	1	5	3	5	2	2
August, 1913.....	17	1	1	1	1	1	1	1	1	8	1	1
September, 1913.....	15	1	1	1	1	1	1	1	1	1	1	4
October, 1913.....	11	1	1	1	1	1	1	1	1	1	1	1

Occurring in specified year and month—Continued.

Month of birth.	1913			1914							
	Octo-ber.	Novem-ber.	Decem-ber.	Janu-ary.	Febru-ary.	March.	April.	May.	June.	July.	Aug-ust.
The year.....	13	5	9	14	8	5	6	11	5	3	1
November, 1912.....	1	1	1	1	1	1	1	1	1	1	1
December, 1912.....	1	1	1	1	1	1	1	1	1	1	1
January, 1913.....	1	1	1	1	1	1	1	1	1	1	1
February, 1913.....	1	1	1	1	1	1	1	1	1	1	1
March, 1913.....	1	1	1	1	1	1	1	1	1	1	1
April, 1913.....	1	1	1	1	1	1	1	1	1	1	1
May, 1913.....	1	1	1	1	1	1	1	1	1	1	1
June, 1913.....	3	1	1	2	2	2	2	2	1	1	1
July, 1913.....	2	1	2	1	1	1	1	2	2	1	1
August, 1913.....	1	1	1	1	1	3	1	1	2	1	1
September, 1913.....	1	1	1	3	1	1	1	2	2	1	1
October, 1913.....	2	1	3	1	2	1	1	2	1	1	1

STILLBIRTHS.

A total of 79 stillbirths occurred among the 1,643 births included in this study. The problem of stillbirths is closely connected with that of the deaths of live-born infants, especially the deaths due to prematurity and other prenatal causes. The stillbirth rate, or percentage of stillbirths, is given in most of the general tables parallel with the infant mortality rate.

The 79 stillbirths formed 4.8 per cent of all births considered in this study. No doubt this is an understatement of the actual number, as the registration of stillbirths is even less complete than that of live births.

Nationality of mother.—The percentage of stillbirths reported for foreign-born mothers was 4.9, slightly higher than that reported for native mothers, for whom it was 4.6. The highest percentage was found among the group of English, Irish, and Scotch mothers. Births to the combined group numbered 115 and 9 of these, or 7.8 per cent, were stillbirths. Among the French-Canadian mothers there were 36 stillbirths, or 5.9 per cent of all births; among Polish mothers only 6, or 3.5 per cent of all births.

TABLE 15.

Nationality of mother.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent. ¹
			Number.	Infant mortality rate. ¹		
All mothers.....	1,643	1,564	268	165.0	79	4.8
Native mothers.....	548	523	67	123.1	26	4.6
Foreign-born mothers.....	1,095	1,041	191	183.5	54	4.9
Canadian, French.....	610	574	129	224.7	36	5.9
Canadian, except French.....	27	27	4	.....	.....	.....
Polish.....	170	164	31	189.0	6	3.5
English, Irish, Scotch.....	115	106	7	66.0	9	7.8
Greek and Syrian.....	72	71	10	.....	1	.....
German.....	30	29	2	.....	1	.....
Jewish.....	24	24	2	.....	.....	.....
Ruthenian and Lithuanian.....	22	21	3	.....	1	.....
All other and not reported.....	26	26	3	.....	.....	.....

¹ Not shown where base is less than 100.

Gainful employment of mother.—Gainful employment of the mothers at some time during pregnancy might be expected, perhaps, to show a more definite relation to a high percentage of stillbirths than any other factor considered in this study. To some degree this appears to be the case for the group of babies under consideration. Mothers gainfully employed had a higher percentage than all mothers or than those not gainfully employed, but the highest percentage

occurred among the mothers gainfully employed away from home and the lowest among those gainfully employed at home.

TABLE 16.

Employment of mother during year before baby's birth.

	Per cent of stillbirths.
All mothers.....	4.8
Not gainfully employed.....	4.1
Gainfully employed.....	5.5
At home.....	1.8
Away from home.....	7.5

The percentage of stillbirths was markedly higher among the older mothers. Among babies of mothers 40 and over they formed 8.9 per cent of all births. Among babies of mothers aged 20 to 24 the percentage was lowest, namely, 3.8. In the two intervening classes, mothers aged 25 to 29 and those aged 30 to 39, the percentages were 4.9 and 4.5, respectively. Births to mothers under 20 numbered 64 and included 5 stillbirths. (See Table 19.)

SEX.

The infant mortality rate among the male infants was higher than that among the female, a result in accord with general experience as shown in practically all vital statistics giving such rates. The difference in rate is much more marked among the natives.

TABLE 17.

Births during selected year and infant deaths.

Sex of baby and nativity of mother.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent.
			Number.	Infant mortality rate.		
All mothers.....	1,643	1,564	268	165.0	79	4.8
Male.....	826	781	149	190.8	45	5.4
Female.....	817	783	100	130.3	34	4.2
Native mothers.....	548	523	67	128.1	26	4.6
Male.....	268	255	44	172.5	13	4.9
Female.....	280	268	23	85.8	12	4.3
Foreign-born mothers.....	1,095	1,041	191	183.5	54	4.9
Male.....	558	526	105	199.6	33	5.7
Female.....	537	515	86	167.0	22	4.1

Masculinity.—It will be noted also that the group studied shows a preponderance of male births, which fact also coincides with the usual showing for birth statistics. The ratio of sexes usually is expressed by the term masculinity, which for our group is 1,011—

that is, 1,011 male births to 1,000 female births. In their contribution to national demography,¹ C. J. Lewis and J. Norman Lewis present some interesting figures concerning the variation of the magnitude of masculinity, and state that "The proportion of masculine and feminine births must be the result of definite causes, and dependent on laws which are not yet adequately known," and that "Under present conditions the possession of a positive masculinity appears to be an integral necessity of a vigorous nationality. The reason for this lies in the heavier mortality which the male suffers as compared with the female in the early years of life. Male children perish not only in early years, but even in early months, at a greater rate than their sisters." Later, "The masculinity of a people rarely exceeds 1,100 or falls below 900," but, "The masculinity of stillbirths is never lower than 1,200, and rises in one instance to 1,700, though it is generally about 1,300."

The variation in masculinity among the babies of native and of foreign-born mothers in Manchester as indicated below is in practical accord with the findings above quoted:

TABLE 18. Nativity of mother.	Masculinity (number of male per 1,000 female births).		
	All births.	Live births.	Stillbirths.
All mothers	1,011	997	1,324
Native mothers	987	952	1,083
Foreign-born mothers	1,039	1,021	1,455

AGE OF MOTHER AND ORDER OF BIRTH.

Age of mother.—The age of the mother at the time of the birth of the baby is another possible factor in infant mortality. A very high proportion of infant deaths occurred among babies born during the selected year to mothers who were 40 years of age and over—19 out of 92 live births. The highest rates, however, were found among the babies of mothers under 25 years of age. The babies of mothers aged from 30 to 39 had a rate of 146.6, which was the lowest found for any group of mothers classified according to age. The rate for this same group differs markedly, however, for native and foreign-born mothers, the babies of native mothers having a rate of 71.4 only, while those of foreign-born mothers had a rate of 176.6. The lowest infant mortality rate for any age group of foreign-born mothers occurred among babies of mothers aged from 25 to 29—namely, a rate of 165. (See Table 19.)

¹ Lewis, C. J. and J. Norman, *Natality and Fecundity*, London, 1906, pp. 110, 111, 121.

These numbers are too small to warrant any general conclusions in regard to the influence of the mother's age upon the infant mortality rate. Individual circumstances and the order of birth of the baby are so closely connected with the question of the age of the mother that caution must be used in drawing inferences based on age alone.

TABLE 19.

Age of mother at birth of child, and nativity.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent. ¹
			Number.	Infant mortality rate. ¹		
All mothers.....	1,643	1,564	288	185.0	79	4.8
Under 25.....	540	517	95	183.8	23	4.3
Under 20.....	64	59	12	.....	5	.....
20 to 24.....	476	458	83	181.2	18	3.8
25 to 29.....	487	468	71	153.3	24	4.9
30 to 39.....	514	491	72	146.6	32	4.5
40 and over.....	101	93	19	.....	9	8.9
Not reported.....	1	1	1	.....	.....	.....
Native mothers.....	548	528	67	128.1	26	4.6
Under 25.....	227	217	34	156.7	10	4.4
Under 20.....	33	30	5	.....	3	.....
20 to 24.....	194	187	29	155.1	7	3.6
25 to 29.....	163	154	20	129.9	9	5.5
30 to 39.....	144	140	10	71.4	4	2.8
40 and over.....	14	12	8	.....	2	.....
Foreign-born mothers.....	1,095	1,041	191	183.5	54	4.9
Under 25.....	313	300	61	203.3	13	4.3
Under 20.....	31	29	7	.....	2	.....
20 to 24.....	282	271	54	199.3	11	3.9
25 to 29.....	324	309	51	165.0	15	4.6
30 to 39.....	370	351	62	176.6	19	5.1
40 and over.....	87	80	16	.....	7	.....
Not reported.....	1	1	1	.....	.....	.....

¹ Not shown where base is less than 100.

Order of birth.—The babies scheduled ranged from the first to the eighteenth child of the mother. Though the numbers on the whole for infants born during the selected year are too small to establish conclusively a biological tendency, one or two facts of significance emerge. First-born children had a markedly higher death rate than second-born children. Fluctuations in the rate according to order of birth after the second showed no special relation, except in the case of exceptionally large families. Babies ninth and later in order of birth, of whom there were 144 live born, had an infant mortality rate of 250, a rate higher than that for any earlier born or for the whole group of earlier born babies, which was 156.3. This fact may explain the higher rate among foreign-born than among native mothers in the age group 30 to 39. Foreign-born girls as a rule marry early and are more likely to have had by this time of life a large number of

children. It is not possible, however, to determine exactly the relative importance of the order of birth as an independent factor in the high infant mortality rate in Manchester.

TABLE 20. Number of child in order of birth, and nativity of mother.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent. ¹
			Number.	Infant mortality rate. ¹		
All mothers.....	1,643	1,564	258	165.0	79	4.8
First.....	454	427	71	166.3	27	5.9
Second.....	317	310	39	125.8	7	2.2
Third.....	226	218	36	165.1	8	3.5
Fourth.....	158	150	30	200.0	8	5.1
Fifth.....	114	108	12	111.1	6	5.3
Sixth, seventh, and eighth.....	221	207	34	164.3	14	6.3
Ninth and later.....	153	144	36	250.0	9	5.9
Native mothers.....	548	523	67	128.1	25	4.6
First.....	198	184	16	87.0	14	7.1
Second.....	126	124	12	129.0	2	1.6
Third.....	90	88	12	.....	2	.....
Fourth.....	42	40	10	.....	2	.....
Fifth.....	31	31	4	.....	2	.....
Sixth, seventh, and eighth.....	46	43	6	.....	2	.....
Ninth and later.....	15	13	3	.....	2	.....
Foreign-born mothers.....	1,095	1,041	191	183.5	54	4.9
First.....	256	243	55	226.3	13	5.1
Second.....	191	186	23	123.7	5	2.6
Third.....	136	130	24	184.6	6	4.4
Fourth.....	116	110	20	181.8	6	5.2
Fifth.....	83	77	8	.....	6	.....
Sixth, seventh, and eighth.....	175	164	28	170.7	11	6.3
Ninth and later.....	138	131	33	251.9	7	5.1
French-Canadian mothers.....	610	574	129	224.7	26	5.9
First.....	130	122	36	295.1	8	6.2
Second.....	90	95	13	.....	4	.....
Third.....	64	60	18	.....	4	.....
Fourth.....	50	54	8	.....	5	.....
Fifth.....	49	44	5	.....	5	.....
Sixth, seventh, and eighth.....	103	98	21	.....	5	4.9
Ninth and later.....	106	101	28	277.2	5	4.7
Other foreign-born mothers.....	485	467	62	132.8	18	3.7
First.....	126	121	19	157.0	5	4.0
Second.....	92	91	10	.....	1	.....
Third.....	72	70	6	.....	2	.....
Fourth.....	57	56	12	.....	1	.....
Fifth.....	34	33	3	.....	1	.....
Sixth, seventh, and eighth.....	72	66	7	.....	6	.....
Ninth and later.....	32	30	5	.....	2	.....

¹ Not shown where base is less than 100.

TABLE 21.

Number of child in order of birth, and nativity of mother.	Per cent distribution of births during selected year and of infant deaths.		
	Total births.	Live births.	Infant deaths.
All mothers.....	100.0	100.0	100.0
First.....	27.6	27.3	27.5
Second.....	19.3	19.8	15.1
Third.....	13.8	13.9	14.0
Fourth.....	9.6	9.6	11.6
Fifth.....	6.9	6.9	4.7
Sixth, seventh, and eighth.....	13.5	13.2	13.2
Ninth and later.....	9.3	9.2	14.0
Native mothers.....	100.0	100.0	100.0
First.....	36.1	35.2	23.9
Second.....	23.0	23.7	22.0
Third.....	16.4	16.8	17.9
Fourth.....	7.7	7.6	14.9
Fifth.....	5.7	5.9	6.0
Sixth, seventh, and eighth.....	8.4	8.2	9.0
Ninth and later.....	2.7	2.5	4.5
Foreign-born mothers.....	100.0	100.0	100.0
First.....	23.4	23.3	28.8
Second.....	17.4	17.9	15.0
Third.....	12.4	12.5	12.6
Fourth.....	10.6	10.6	10.5
Fifth.....	7.6	7.4	4.2
Sixth, seventh, and eighth.....	16.0	15.8	14.7
Ninth and later.....	12.6	12.6	17.3
French-Canadian mothers.....	100.0	100.0	100.0
First.....	21.3	21.3	27.9
Second.....	16.2	16.6	10.1
Third.....	10.5	10.5	14.0
Fourth.....	9.7	9.4	6.2
Fifth.....	8.0	7.7	3.9
Sixth, seventh, and eighth.....	16.9	17.1	16.3
Ninth and later.....	17.4	17.6	21.7
Other foreign-born mothers.....	100.0	100.0	100.0
First.....	26.0	25.9	20.6
Second.....	19.0	19.5	16.1
Third.....	14.8	15.0	9.7
Fourth.....	11.8	12.0	12.4
Fifth.....	7.0	7.1	4.8
Sixth, seventh, and eighth.....	14.8	14.1	11.3
Ninth and later.....	6.6	6.4	8.1

Size of family.—The order of birth of the baby is of interest as indicating the relative tendency of the different classes to have large families. Babies ninth or later in order of birth were born chiefly in types of families with generally high infant mortality rates; 69.3 per cent were born to French-Canadian mothers, and the tendency to have many children is more common in the lower-earnings classes than in the higher. This tendency appears from the following table. Of the 1,643 babies considered, 60.7 per cent belonged to families in which the total number of births had been three or less.

TABLE 22.

Number of child in order of birth.	Infants born during selected year.									
	Total.		Whose fathers earned specified amount.							
			Under \$450.		\$450 to \$549.		\$550 to \$649.		\$650 to \$849.	
	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.
Total.....	1,643	100.0	225	100.0	274	100.0	297	100.0	426	100.0
First.....	454	27.6	66	29.3	72	26.3	92	31.0	90	21.1
Second.....	317	19.3	40	17.8	51	18.6	49	16.5	92	21.6
Third.....	226	13.8	32	14.2	39	14.2	29	9.8	68	16.0
Fourth.....	158	9.6	26	11.6	27	9.9	28	9.4	47	11.0
Fifth.....	114	6.9	14	6.2	13	4.7	29	9.8	28	6.6
Sixth.....	96	5.8	13	5.8	14	5.1	20	6.7	28	6.6
Seventh.....	74	4.5	9	4.0	15	5.5	16	5.4	17	4.0
Eighth.....	61	3.1	3	1.3	7	2.6	12	4.0	17	4.0
Ninth.....	39	2.4	7	3.1	6	2.2	7	2.4	9	2.1
Tenth.....	37	2.3	7	3.1	5	1.8	5	1.7	14	3.3
Eleventh.....	25	1.5	3	1.3	7	2.6	3	1.0	8	1.9
Twelfth.....	20	1.2	1	.4	10	3.6	4	1.3	3	.7
Thirteenth.....	13	.8	2	.9	3	1.1	3	1.0	1	.2
Fourteenth.....	9	.5	2	.9			2	.7	3	.7
Fifteenth.....	3	.2			1	.4				
Sixteenth.....	0	.4			3	1.1	2	.7	1	.2
Eighteenth.....	1	.1			1	.4				

31

Whose fathers earned specified amount—Continued.

	\$850 to \$1,049.		\$1,050 to \$1,249.		\$1,250 and over.		No earnings. ¹		Not reported.	
	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.
Total.....	199	100.0	72	100.0	105	100.0	24	100.0	21	100.0
First.....	61	30.7	21	29.2	38	36.2	9	37.5	5	23.8
Second.....	42	21.1	14	19.4	27	25.7			2	9.5
Third.....	32	16.1	10	13.9	9	8.6	4	16.7	3	14.3
Fourth.....	10	5.0	6	8.3	9	8.6	3	12.5	2	9.5
Fifth.....	16	8.0	5	6.9	6	5.7	1	4.2	2	9.5
Sixth.....	11	5.5	4	5.6	4	3.8	1	4.2	1	4.8
Seventh.....	9	4.5	1	1.4	5	4.8			2	9.5
Eighth.....	6	3.0	3	4.2	2	1.9	1	4.2		
Ninth.....	4	2.0	4	5.6	3	2.9	3	12.5	1	4.8
Tenth.....	1	.5	1	1.4	1	1.0			3	14.3
Eleventh.....	2	1.0	1	1.4			1	4.2		
Twelfth.....	2	1.0								
Thirteenth.....	2	1.0	1	1.4			1	4.2		
Fourteenth.....	1	.5			1	1.0				
Fifteenth.....			1	1.4						

¹ Includes 1 father living on his income.

ATTENDANT AT BIRTH.

The question of attendant at birth is of importance in all communities and especially in those with a large foreign population accustomed to the services of a midwife or even to some extent to doing without trained care at childbirth. In Manchester, however, this custom is not general, for in 90.1 per cent of the registered births considered the mother had a physician in attendance at birth and in only 9.3 per cent a midwife. The practice of the native mothers

differed considerably from that of the foreign-born, 98.9 per cent of the former having been attended by a physician and only 85.8 per cent of the latter.

Attendant at birth.	Births during selected year to—					
	All mothers.		Native mothers.		Foreign-born mothers.	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
All classes.....	1,643	100.0	548	100.0	1,095	100.0
Physician.....	1,481	90.1	542	98.9	939	85.8
Midwife.....	153	9.3	4	.7	149	13.6
Other, none, or not reported.....	9	.5	2	.4	7	.6

The proportion of cases accredited to midwives is doubtless an understatement, as in cases of difficult labor the midwife frequently calls in a physician and the case is accredited to him.

It was seldom the custom of mothers to seek medical advice during pregnancy, and many of the poorer mothers, and especially of the foreign-born, resumed part or all of their customary duties within a few days after the birth of the baby. Nevertheless a considerable number even among this group did remain in bed at least a week or 10 days after childbirth, with the services either of a practical nurse or of a visiting nurse from some philanthropic organization, or at least under the care of members of the family. It was not at all uncommon for the husband to act as nurse, particularly among the French Canadians. In these families in some cases where there were no grown children the husband continued to relieve the mother of the heavy housework, such as scrubbing and washing, for a number of weeks after confinement.

ECONOMIC AND INDUSTRIAL FACTORS.

Babies born into the homes of unskilled workers where earnings are small face greater hazards than those in more fortunate circumstances. When the 1,564 live-born babies included in this study are grouped according to father's earnings, it is found that among the babies in the lowest-earnings group infant deaths are more than four times as frequent as in the highest-earnings group.

Another point which appears from a study of the findings is that gainful employment of the mother away from home was accompanied by a high infant mortality rate, higher even than that for all babies in the low-earnings groups.

Occupation of father.—The great majority of the babies included in this study had fathers who were engaged in occupations outside of professional, clerical, and mercantile groups; 725 of them were factory operatives. The majority of these, 442, were textile opera-

tives, but in all 597 babies had fathers employed in textile mills in some capacity, either as operatives or as laborers, teamsters, clerks, etc.

TABLE 24.

Infants born during selected year.

Occupation of father.	Total.	Whose fathers earned specified amount.							
		Under \$450.	\$450 to \$549.	\$550 to \$649.	\$650 to \$849.	\$850 to \$1,049.	\$1,050 to \$1,249.	\$1,250 and over.	No earnings. ¹
All occupations ²	1,643	225	274	297	426	199	72	105	24
Manufacturing and mechanical industries.....	1,086	181	214	212	291	98	34	33	18
Blacksmiths.....	7	2	2	.....	2	1	.....	.....	.....
Boilermakers.....	8	.....	.....	4	3	1	.....	.....	.....
Builders and contractors.....	9	.....	.....	2	1	3	2	1	.....
Compositors, linotype operators, and pressmen.....	6	1	1	1	2	.....	1	.....	.....
Electricians.....	12	.....	.....	1	4	5	1	1	.....
Engineers and firemen.....	42	.....	2	8	26	1	.....	2	1
Factory operatives.....	725	154	165	145	161	48	26	11	10
Textile.....	442	121	129	87	78	11	4	1	7
Shoe.....	200	24	26	38	65	28	11	6	1
Cigar and tobacco.....	31	1	1	2	6	7	10	4	.....
Other industries.....	52	8	9	18	12	2	1	.....	2
Laborers, helpers, and apprentices.....	56	14	17	14	10	1	.....	.....	.....
Machinists, millwrights, and toolmakers.....	34	.....	5	5	15	6	1	2	.....
Manufacturers (officials and managers).....	17	.....	.....	.....	2	2	1	12	.....
Shoemakers and cobblers.....	7	.....	2	.....	.....	2	.....	2	1
Skilled mechanics, building trades.....	138	8	17	30	56	21	1	1	1
Tailors.....	10	.....	1	1	5	1	1	1	.....
Other pursuits.....	15	2	2	1	4	6	.....	.....	.....
Trade.....	240	15	24	41	57	39	15	43	2
Bankers, brokers, real estate and insurance agents.....	15	.....	.....	.....	.....	4	4	7	.....
Commercial travelers and salesmen.....	67	2	3	12	17	17	4	10	2
Delivery men.....	56	4	10	18	31	2	1	.....	.....
Laborers.....	12	6	3	1	3	.....	.....	.....	.....
Retail and wholesale dealers (proprietors, officials, and managers).....	80	3	8	9	10	14	6	26	2
Other pursuits.....	9	.....	.....	1	6	2	.....	.....	.....
Domestic and personal service.....	90	7	11	6	29	22	6	6	1
Barbers.....	19	.....	2	2	9	4	.....	2	.....
Saloonkeepers and bartenders.....	29	2	2	3	8	13	2	3	1
Servants.....	10	1	.....	.....	8	1	.....	.....	.....
Other pursuits.....	32	4	7	1	9	4	4	1	1
Transportation.....	88	9	11	18	26	13	7	5	.....
Chauffeurs, teamsters, and expressmen.....	35	5	8	11	8	2	.....	1	.....
Conductors, motormen, and trainmen.....	27	.....	1	4	11	6	2	3	.....
Express, post, telegraph, and telephone employees.....	6	.....	.....	.....	1	.....	5	.....	.....
Laborers.....	13	4	2	3	3	1	.....	.....	.....
Proprietors, officials, and managers.....	3	.....	.....	.....	.....	2	.....	1	.....
Other pursuits.....	4	.....	.....	.....	2	2	.....	.....	.....

¹ Includes 1 father living on his income.

² Of 597 fathers in the textile industry 442 were operatives and 155 employees engaged in occupations not peculiar to the industry, such as officials, clerks, carpenters, teamsters, etc. The latter were classified in the occupational groups to which they belong.

TABLE 24—Continued.

Occupation of father.	Infants born during selected year.								
	Total.	Whose fathers earned specified amount.							
		Under \$450.	\$450 to \$549.	\$550 to \$649.	\$650 to \$749.	\$750 to \$1,049.	\$1,050 to \$1,249.	\$1,250 and over.	No earnings.
Clerical occupations, all industries.....	30	1	1	8	15	9	1	4	-----
Public service.....	33	4	6	7	4	7	2	2	----- 1
Laborers.....	22	4	6	7	4	-----	-----	-----	----- 1
Officials, firemen, and policemen.	11	-----	-----	-----	-----	7	2	2	-----
Professional and semiprofessional pursuits.....	27	1	-----	1	2	5	6	11	----- 1
Agriculture and forestry...	20	2	4	4	3	4	-----	1	----- 2
Farmers.....	8	1	-----	1	1	3	-----	1	----- 1
Farm laborers.....	10	1	4	2	2	1	-----	-----	-----
Others.....	2	-----	-----	1	-----	-----	-----	-----	----- 1
No occupation ¹	7	-----	-----	-----	-----	-----	-----	-----	7 -----
Not reported.....	13	5	3	-----	-----	2	1	-----	1 -----

¹ Includes 1 father living on his income.

Father's earnings an index of economic status.—The father's earnings, it is believed, furnish the most reliable index to the economic status of the family because in most cases they are not only the chief support but also the most stable and regular element in the family income. Supplementary sources of income such as mother's and children's earnings are likely to be temporary and fluctuating. A special objection to lumping father's earnings with the earnings of the mother and children is that the gainful employment of the latter indicates a low economic status which would tend to be obscured were their earnings combined. Furthermore, the increase in family income due to mother's going to work is one brought about by creating a possible factor in infant mortality, namely, the withdrawal of the mother's care. Income derived from property is found chiefly in the group of fathers earning \$1,250 or more, all of whom are classed together in any event. The father's earnings therefore best represent the scale of living attainable through a period of years and fix the living habits and the real economic status of the family.

Rates of pay can not be computed from the earnings reported. On account of lack of employment or for other reasons the father may not have worked steadily. It can not be inferred, because a father earned, for example, only \$350 in a year's time that his unit rate was so low that he could not have earned more if at work full time throughout the year.

Distribution of economic groups.—A classification of babies on the basis of father's earnings shows that the fathers of 48.4 per cent, or

nearly half of them, earned less than \$650 a year and that the fathers of 74.4 per cent, approximately three-fourths, earned under \$850. Only 6.4 per cent had fathers earning \$1,250 or more, while 225, or 13.7 per cent of the whole number, had fathers who earned less than \$450. In addition to those for whom earnings were reported the fathers of 23 babies either had died or, during the year following the child's birth, did not contribute to the support of their families because they had deserted or had earned nothing on account of illness. In the case of 21 babies the father's earnings could not be ascertained. (See Table 25.)

DIAGRAM IV.—PER CENT OF BIRTHS TO ALL MOTHERS, NATIVE MOTHERS AND FOREIGN-BORN MOTHERS, ACCORDING TO FATHER'S EARNINGS.

PER CENT.

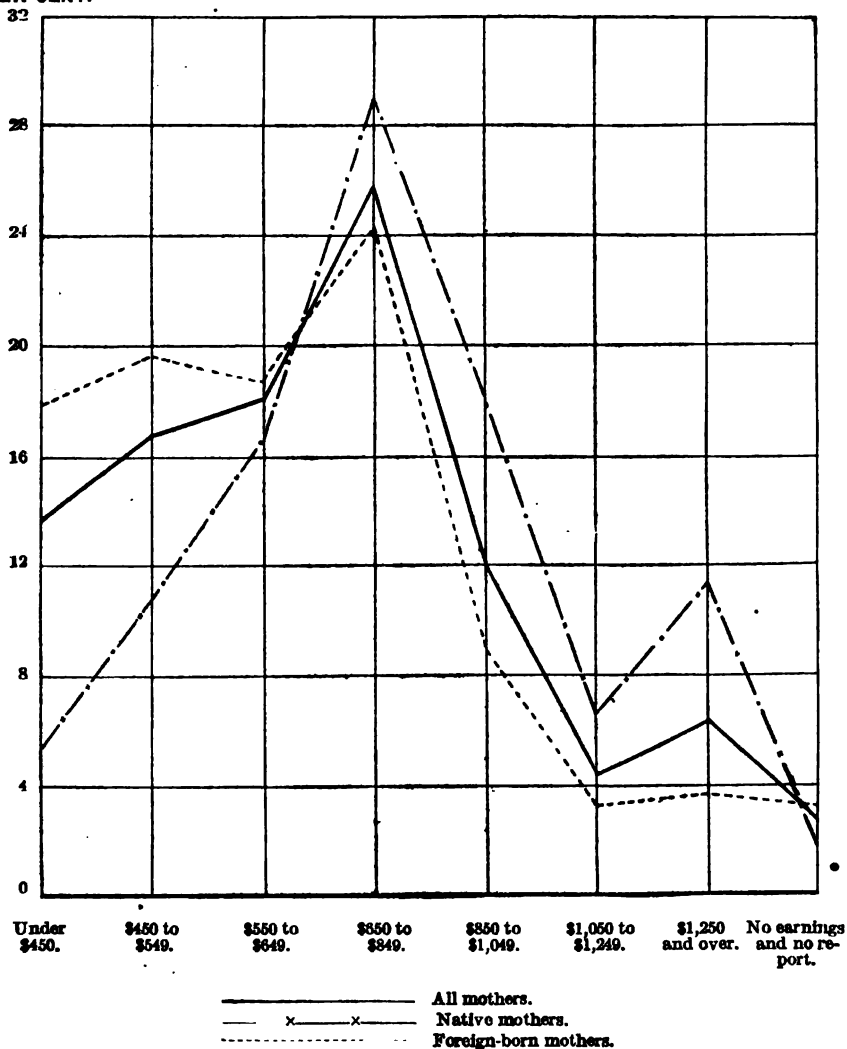


TABLE 26.

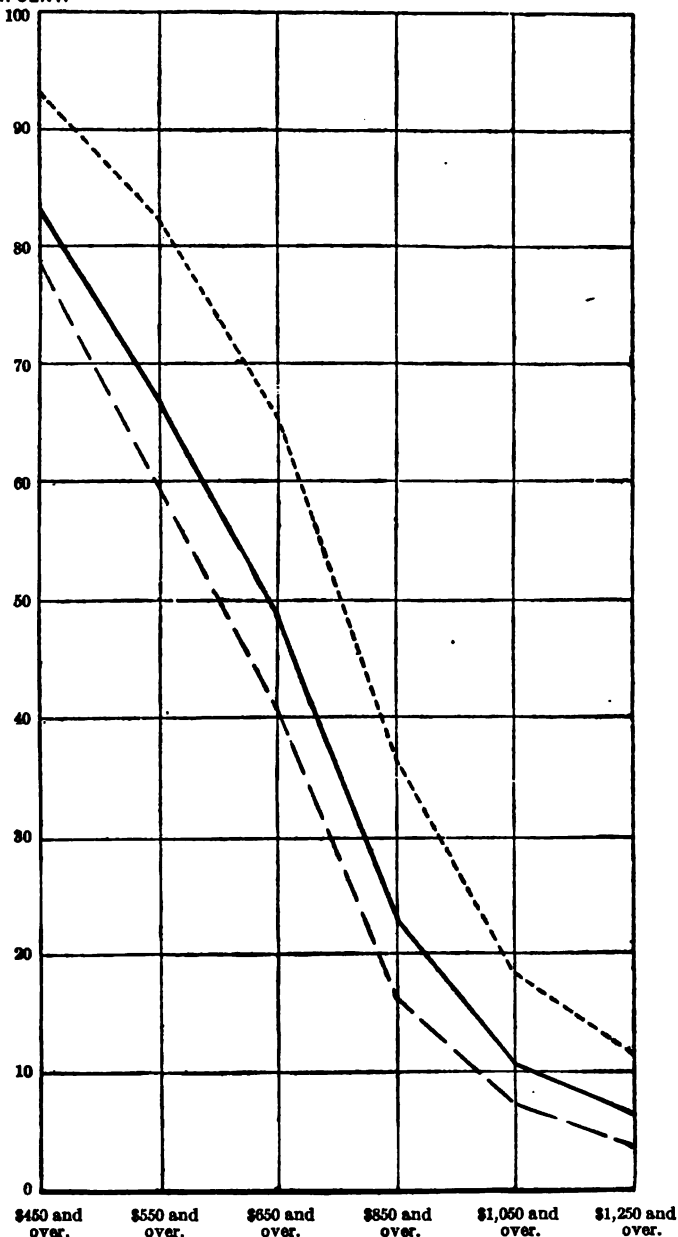
Earnings of father.	Births during selected year to—					
	All mothers.		Native mothers.		Foreign-born mothers.	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
All classes.....	1,643	100.0	548	100.0	1,095	100.0
Under \$450.....	225	13.7	29	5.3	196	17.9
\$450 to \$549.....	274	16.7	59	10.8	215	19.6
\$550 to \$649.....	297	18.1	92	16.8	205	18.7
\$650 to \$749.....	426	25.9	160	29.2	266	24.3
\$750 to \$1,049.....	199	12.1	100	18.2	99	9.0
\$1,050 to \$1,249.....	72	4.4	36	6.6	36	3.3
\$1,250 and over.....	105	6.4	63	11.5	42	3.8
No earnings ¹	24	1.5	5	.9	19	1.7
Not reported.....	21	1.3	4	.7	17	1.6

¹ Includes 1 father living on his income.

The same economic facts shown in the preceding table and diagram are presented in a somewhat different form in the next diagram, which shows cumulative groups by father's earnings—that is, those earning a specified amount and over.

DIAGRAM V.—PER CENT OF BIRTHS TO ALL MOTHERS, NATIVE MOTHERS, AND FOREIGN-BORN MOTHERS IN GROUPS WHERE FATHERS EARNED SPECIFIED AMOUNTS AND OVER.

PER CENT.



Earnings of father.	Percentage of births to—		
	All mothers.	Native mothers.	Foreign-born mothers.
\$450 and over.....	83.6	93.1	78.8
\$550 and over.....	66.9	82.3	59.2
\$650 and over.....	48.8	65.5	40.5
\$850 and over.....	22.9	36.3	16.2
\$1,050 and over.....	10.8	18.1	7.1
\$1,250 and over.....	6.4	11.5	3.8

————— All mothers.
 - - - - - Native mothers.
 - . - . - Foreign-born mothers.

Infant mortality rate by father's earnings.—The infant mortality rate shows a marked and almost regular decline as the father's earnings become larger. In the group of babies where the father's earnings are less than \$450 per annum the infant mortality rate is 242.9, while in the next group, where the fathers earn from \$450 to \$549, the rate is 173.6. It rises very slightly in the next class, \$550 to \$649, namely, to 174.5, and thereafter drops steadily with each advance in economic status. The rate, however, does not fall below 100 until the father's earnings reach \$1,050 or more. Babies whose fathers earn \$1,250 and over per annum have a death rate of only 58.3.

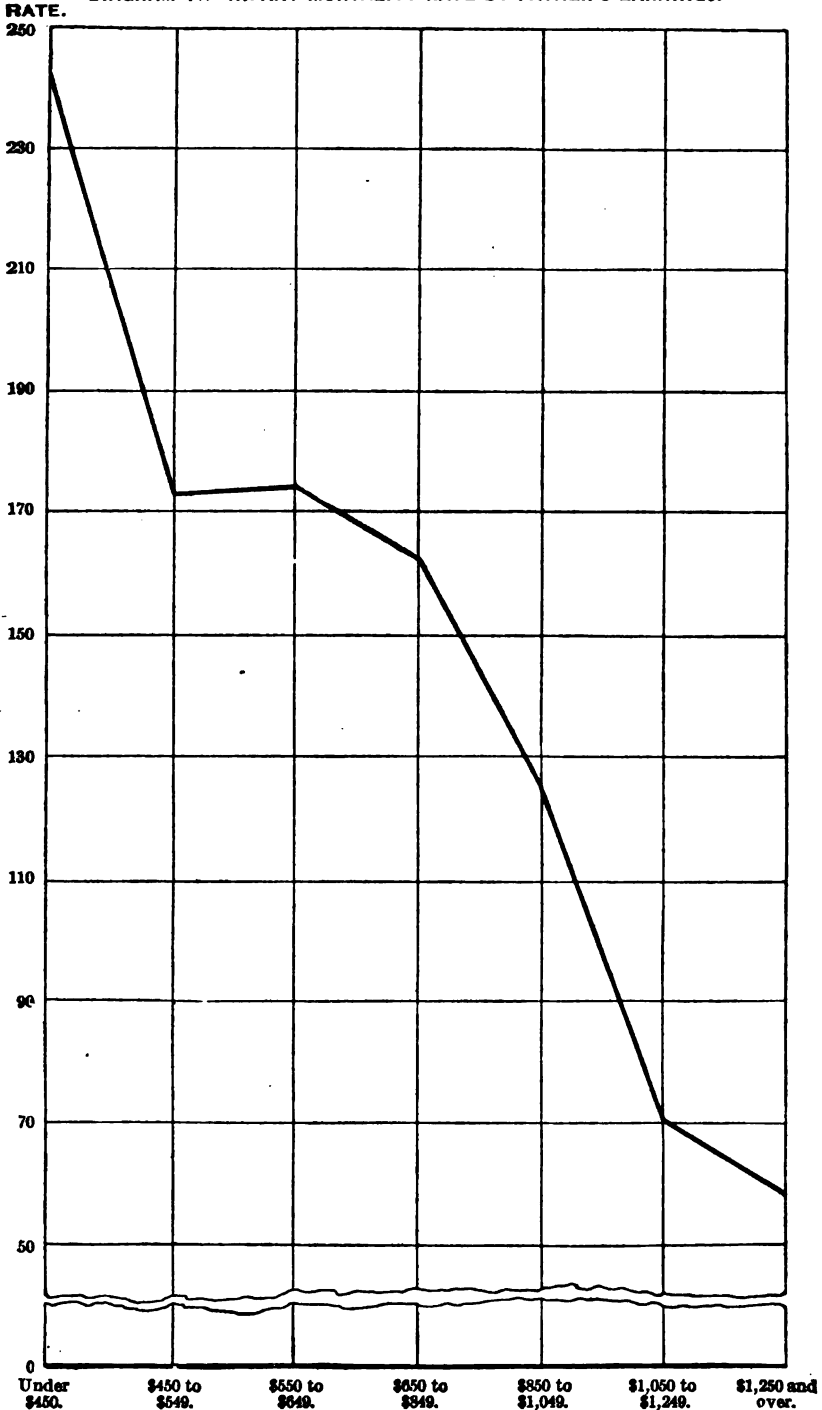
TABLE 20.

Earnings of father and nativity of mother.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent. ¹
			Number.	Infant mortality rate. ¹		
All mothers.....	1,643	1,564	258	165.0	79	4.8
Under \$450.....	225	210	51	242.9	15	6.7
\$450 to \$549.....	274	265	46	173.6	9	3.3
\$550 to \$649.....	297	275	48	174.5	22	7.4
\$650 to \$849.....	438	406	66	162.6	20	4.7
\$850 to \$1,049.....	199	192	24	125.0	7	3.5
\$1,050 to \$1,249.....	72	71	5	.....	1	.....
\$1,250 and over.....	105	103	6	58.3	2	1.9
No earnings ²	24	22	8	.....	2	.....
Not reported.....	21	20	4	.....	1	.....
Native mothers.....	548	523	67	128.1	25	4.6
Under \$450.....	29	23	5	.....	6	.....
\$450 to \$549.....	59	58	3	.....	1	.....
\$550 to \$649.....	92	85	18	.....	7	.....
\$650 to \$849.....	160	155	22	141.9	5	3.1
\$850 to \$1,049.....	100	97	13	.....	3	3.0
\$1,050 to \$1,249.....	36	35	1	.....	1	.....
\$1,250 and over.....	63	62	1	.....	1	.....
No earnings ²	5	4	2	.....	1	.....
Not reported.....	4	4	2	.....	.....	.....
Foreign-born mothers.....	1,095	1,041	191	183.5	54	4.9
Under \$450.....	196	187	46	246.0	9	4.6
\$450 to \$549.....	215	207	43	207.7	8	3.7
\$550 to \$649.....	205	190	30	157.9	15	7.3
\$650 to \$849.....	266	251	44	175.3	15	5.6
\$850 to \$1,049.....	99	95	11	.....	4	.....
\$1,050 to \$1,249.....	26	26	4	.....	.....	.....
\$1,250 and over.....	42	41	5	.....	1	.....
No earnings ²	19	18	6	.....	1	.....
Not reported.....	17	16	2	.....	1	.....
French-Canadian mothers.....	610	574	129	224.7	36	5.9
Under \$450.....	52	48	15	.....	4	.....
\$450 to \$549.....	121	117	28	239.3	4	3.3
\$550 to \$649.....	133	123	24	195.1	10	7.5
\$650 to \$849.....	177	165	38	230.3	12	6.8
\$850 to \$1,049.....	68	65	10	.....	3	.....
\$1,050 to \$1,249.....	18	18	3	.....	.....	.....
\$1,250 and over.....	22	21	5	.....	1	.....
No earnings ²	10	9	4	.....	1	.....
Not reported.....	9	8	2	.....	1	.....
Other foreign-born mothers.....	485	467	62	132.8	18	3.7
Under \$450.....	144	139	31	223.0	5	3.5
\$450 to \$549.....	94	90	15	.....	4	.....
\$550 to \$649.....	72	67	6	.....	5	.....
\$650 to \$849.....	89	86	6	.....	3	.....
\$850 to \$1,049.....	31	30	1	.....	1	.....
\$1,050 to \$1,249.....	18	18	1	.....	.....	.....
\$1,250 and over.....	20	20	.....	.....	.....	.....
No earnings ²	9	9	2	.....	.....	.....
Not reported.....	8	8	.....	.....	.....	.....

¹ Not shown where base is less than 100.² Includes 1 father living on his income.

The following diagram graphically illustrates the constancy with which infant death rates fall as earnings rise.

DIAGRAM VI.—INFANT MORTALITY RATE BY FATHER'S EARNINGS.



Father's earnings supplemented.—The families of 924 babies, 56.2 per cent of the whole number, had other sources of income than the father's earnings. Supplementary income derived from earnings of mother and children occurred more frequently, as might be expected, where the father's earnings were low than in the class with higher earnings, for low earnings of the father often necessitate gainful employment of other members of the family. Mother's earnings where derived from boarders or lodgers were reported gross—that is, as the total receipts from these sources. Actual net profit from real estate could never be ascertained, and rentals, therefore, were always reported gross. The data on total income, it will be seen, are much less reliable than those regarding father's earnings on account of the difficulty in general of ascertaining the facts in regard to such income, and in particular of separating net income from gross.

Total income.—Though the information obtained on total family income is not wholly accurate, the indications are that in the group of families studied in Manchester supplementary sources of income, where they existed, were of much less importance in determining the family's economic standing than was the father's contribution. In the group where the father's earnings were under \$550 per annum other sources of income existed in 76 per cent of the cases, and only 95, or 25.1 per cent, of 379 such families had their whole income brought up to \$850 or more. Where the father's earnings were from \$550 to \$649 per annum the families of 55.2 per cent of the babies had other sources of income, but less than half of those reporting other income had a total annual income of more than \$850. The relative importance of other sources of income continues to grow less as the father's earnings increase.

TABLE 27.

Total family income.	Infants born during selected year.							
	Total.		Whose fathers earned specified amount.					
			Under \$550.		\$550 to \$649.		\$650 to \$849.	
	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.
All classes.....	1,643	100.0	499	100.0	297	100.0	426	100.0
Own income.....	1	.1						
Income from father's earnings only.....	718	43.7	120	24.0	133	44.8	212	49.8
Income including more than father's earnings.....	924	56.2	379	76.0	164	55.2	214	50.2
Under \$550.....	81	4.9	68	13.6				
\$550 to \$649.....	102	6.2	83	16.6	16	5.4		
\$650 to \$849.....	245	14.9	117	23.4	66	22.2	61	14.3
\$850 to \$1,049.....	199	12.1	59	11.8	35	11.8	81	19.0
\$1,050 to \$1,249.....	95	5.8	14	2.8	17	5.7	37	8.7
\$1,250 and over.....	149	9.1	22	4.4	22	7.4	30	7.0
Not reported.....	53	3.2	16	3.2	8	2.7	5	1.2

TABLE 27—Continued.

Total family income.	Infants born during selected year—Continued.							
	Whose fathers earned specified amount—Continued.							
	\$850 to \$1,049.		\$1,050 to \$1,249.		\$1,250 and over.		No earnings.	
	Num-ber.	Percent distri-bution.	Num-ber.	Percent distri-bution.	Num-ber.	Percent distri-bution.	Num-ber.	Percent distri-bution.
All classes.....	199	100.0	72	100.0	105	100.0	24	100.0
Own income.....							1	4.2
Income from father's earnings only.....	119	59.8	55	76.4	75	71.4		
Income including more than father's earnings.....	80	40.2	17	23.6	30	28.6	23	95.8
Under \$550.....							13	54.2
\$550 to \$849.....							3	12.5
\$850 to \$1,049.....							1	4.2
\$1,050 to \$1,249.....	21	10.6					3	12.5
\$1,250 and over.....	25	12.6	2	2.8				
Not reported.....	30	15.1	15	20.8	30	28.6		
	4	2.0					3	12.5

Father's earnings and employment of mother.—Gainful employment of the mother, in so far as it accompanies low earnings of the father, would naturally be associated with a high infant mortality rate. It may act independently, however, and either add to the disadvantages which the baby suffers on account of poverty or mitigate them according to whether the loss of the mother's care, which it involves, is offset or not by the added income. But in general the babies of working mothers in Manchester had a higher infant mortality rate than babies whose mothers were not gainfully employed.

It has been often alleged that in industrial communities such as Manchester, which offer ready employment for women, the reason married women and mothers seek gainful employment is either because of the temptation to earn pin money or money for some special purpose such as the buying of a home or because women learn economic independence before marriage and prefer the factory to housework. Individual instances of this sort were encountered in Manchester, but insufficient or low earnings on the part of the father appear to be the most potent reason for the mother's going to work. Where the fathers earned less than \$450 a year 73.3 per cent of the mothers were gainfully employed during some part of the year after the baby's birth. With each rise in economic status the proportion of babies with mothers gainfully employed falls but does not really reach a small proportion, 9.6 per cent, until the group with fathers earning \$1,050 and over a year is reached. These proportions, however, are markedly different among the native and the foreign born, particularly those other than French Canadians. (See Table 28.)

Of the 722 babies whose mothers were gainfully employed the year after childbirth 45.4 per cent were in families where the earnings of

the father were under \$550 per annum; 63.6 per cent where the earnings were under \$650; and 85.2 per cent where the fathers earned under \$850 a year.

TABLE 28.

Earnings of father and nativity of mother.	Births ¹ during selected year.		
	Total.	To mothers gainfully employed during year following baby's birth.	
		Number.	Per cent.
All mothers.....	1,643	722	43.9
Under \$450.....	225	165	73.3
\$450 to \$549.....	274	163	59.5
\$550 to \$649.....	297	131	44.1
\$650 to \$849.....	426	156	36.6
\$850 to \$1,049.....	190	55	27.6
\$1,050 to \$1,249.....	72	7	9.7
\$1,250 and over.....	105	10	9.5
No earnings ²	24	22	-----
Not reported.....	21	13	-----
Native mothers.....	548	167	30.5
Under \$450.....	29	16	55.2
\$450 to \$549.....	59	29	48.2
\$550 to \$649.....	92	33	35.9
\$650 to \$849.....	160	50	31.3
\$850 to \$1,049.....	100	24	24.0
\$1,050 to \$1,249.....	36	3	8.3
\$1,250 and over.....	63	5	7.9
No earnings ²	5	5	-----
Not reported.....	4	2	-----
Foreign-born mothers.....	1,095	555	50.7
Under \$450.....	196	149	76.0
\$450 to \$549.....	215	134	62.3
\$550 to \$649.....	205	98	47.8
\$650 to \$849.....	266	106	39.8
\$850 to \$1,049.....	99	31	31.3
\$1,050 to \$1,249.....	36	4	11.1
\$1,250 and over.....	42	5	11.9
No earnings ²	19	17	-----
Not reported.....	17	11	-----
French-Canadian mothers.....	610	253	41.5
Under \$450.....	52	29	55.8
\$450 to \$549.....	121	62	51.2
\$550 to \$649.....	133	61	45.9
\$650 to \$849.....	177	61	34.5
\$850 to \$1,049.....	68	22	32.4
\$1,050 to \$1,249.....	18	2	11.1
\$1,250 and over.....	22	2	9.1
No earnings ²	10	9	-----
Not reported.....	9	5	-----
Other foreign-born mothers.....	485	302	62.3
Under \$450.....	144	120	83.3
\$450 to \$549.....	94	72	76.6
\$550 to \$649.....	72	37	51.4
\$650 to \$849.....	89	45	50.6
\$850 to \$1,049.....	31	9	29.0
\$1,050 to \$1,249.....	18	2	11.1
\$1,250 and over.....	20	3	15.0
No earnings ²	9	8	-----
Not reported.....	8	6	-----

¹ Includes stillbirths.

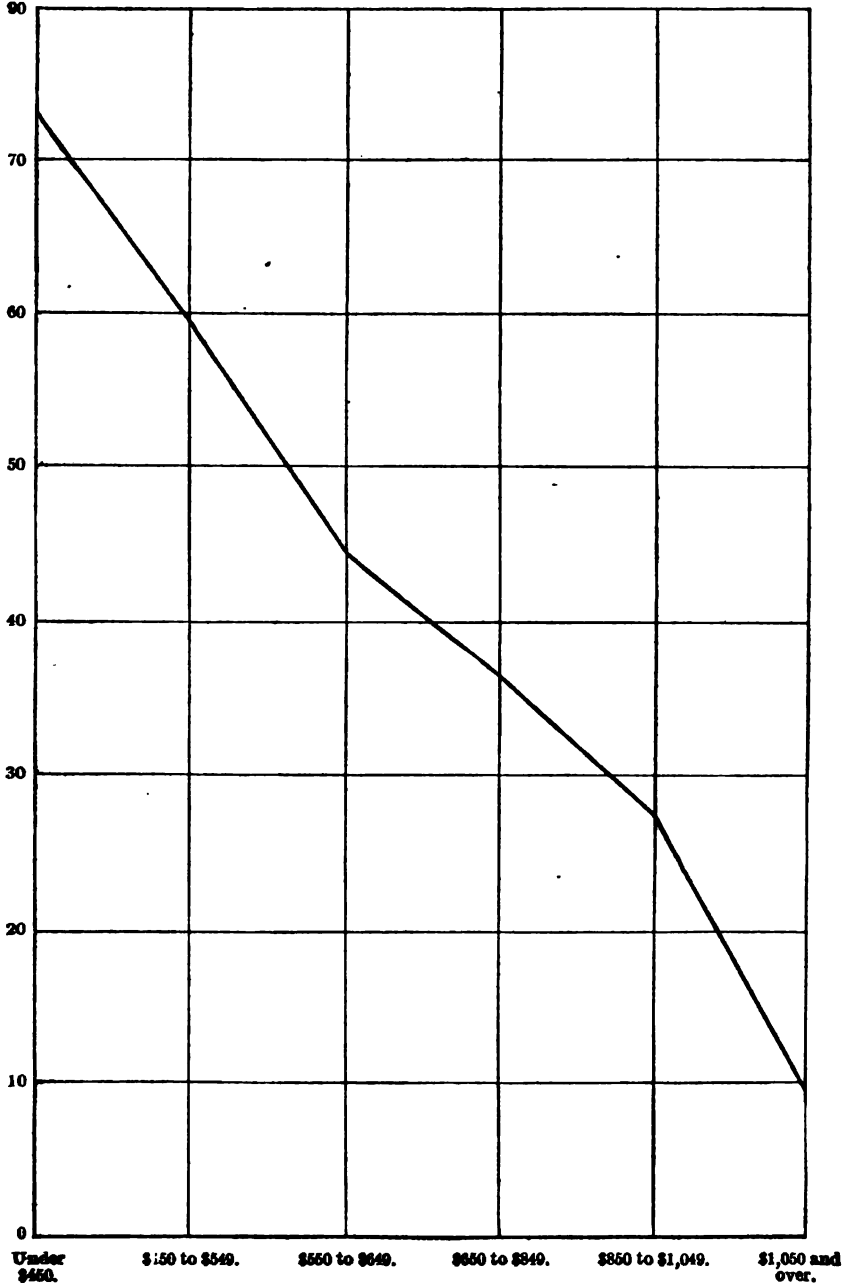
² Includes 1 father living on his income.

From the figures just presented it may not be possible to determine exactly the yearly earnings that a man must have in order to maintain his family unaided, but the fact that the majority of all mothers in the group where the father's earnings fall below \$650 were gainfully

employed at some time during the year following childbirth shows a significant relation between the gainful employment of mothers and the low earnings of fathers.

DIAGRAM VII.—PER CENT OF MOTHERS GAINFULLY EMPLOYED DURING YEAR FOLLOWING BABY'S BIRTH WHEN FATHERS EARNED SPECIFIED AMOUNTS.

PER CENT.



Mother's earnings.—Mother's earnings were tabulated separately from income from other sources and they were found to be relatively small; in more than half of the instances they amounted to less than \$250 per mother. There were 722 babies, live born and stillborn, or 43.9 per cent of the whole number, whose mothers were gainfully employed at some time during the year following their birth. More than one-third of the working mothers earned under \$150 during the year and only 3.5 per cent of them earned as much as \$550. A considerably larger proportion of the foreign-born mothers than of the native mothers earned more than \$250. These contributions were not all net gain to the family, however, even when derived from other work than keeping boarders and lodgers, for when the mother worked out it sometimes became necessary to hire a caretaker for the baby or to incur other extra expense in housekeeping.

Earnings of mother during year following baby's birth.	Births during selected year to gainfully employed mothers.					
	Total.		Native.		Foreign-born.	
	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.
All classes.....	722	100.0	167	100.0	555	100.0
Under \$150.....	263	36.4	65	38.9	198	35.7
\$150 to \$249.....	148	20.5	41	24.6	107	19.3
\$250 to \$349.....	119	16.5	25	15.0	94	16.9
\$350 to \$549.....	127	17.6	19	11.4	108	19.5
\$550 and over.....	25	3.5	4	2.4	21	3.8
Not reported.....	40	5.5	13	7.8	27	4.9

Work during year before baby's birth.—Nearly half the whole number of babies included in the investigation had mothers who had engaged in gainful employment at some time during the year previous to the baby's birth. The occupations included 504 cases where the work was away from home, 427 of which were of employment in the textile mills and 47 in other factories.

Occupation of mother during year before baby's birth.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.	Infant mortality rate. ¹	Number.	Per cent. ¹
			Number.			
All mothers.....	1,643	1,564	258	165.0	79	4.8
Not gainfully employed.....	864	829	111	133.9	35	4.1
Gainfully employed.....	776	733	146	199.2	43	5.8
At home.....	272	267	40	149.8	5	1.8
Keeping lodgers.....	239	234	36	153.8	5	2.1
Other home work.....	33	33	4	.....	.....	.....
Away from home.....	504	466	106	227.5	33	7.5
Textile mill operatives.....	437	395	95	240.5	32	7.8
Other factory operatives.....	47	43	6	.....	4	.....
Clerks and saleswomen.....	11	10	1	.....	1	.....
Servants.....	12	11	4	.....	1	.....
Other occupations.....	7	7	.....	.....	.....	.....
Not reported.....	3	2	1	.....	1	.....

¹ Not shown where base is less than 100.

Babies of mothers gainfully employed during the year preceding the baby's birth had a mortality rate of 199.2, whereas the rate for babies of mothers who were not so employed was 133.9. The rate for babies of mothers whose gainful work was in the home was 149.8; for babies whose mothers worked away from home, 227.5. This latter rate is somewhat lower than the rate of 242.9 reported for babies in the lowest economic class—those whose fathers earned under \$450 per annum. However, the total number of live-born babies whose mothers worked during the year previous to childbirth was 733, while the number whose fathers earned under \$450 was only 210. In order to compare groups containing the largest possible number of coincidences between low earnings and mother's work it is necessary to consider all live-born babies whose fathers' earnings were under \$650 per annum. These babies numbered 750, and the infant mortality rate was 193.3, which is appreciably lower than the one quoted above for babies whose mothers were gainfully employed away from home the year previous to childbirth. The influence upon stillbirths of mother's work before the birth of her child has been shown already in the discussion of that topic on page 31.

TABLE 31.

TABLE 31. Employment of mother at home and away from home during year before baby's birth and nativity of mother.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Percent. ¹
			Number.	Infant mortality rate. ¹		
All mothers.....	1,643	1,564	258	165.0	79	4.8
Not gainfully employed.....	864	829	111	133.9	35	4.1
Gainfully employed.....	776	733	146	199.2	43	5.5
At home.....	272	267	40	149.8	5	1.8
Away from home.....	504	466	106	227.5	38	7.5
Not reported.....	3	2	1	.....	1	.....
Native mothers.....	548	523	67	128.1	25	4.6
Not gainfully employed.....	352	338	31	91.7	14	4.0
Gainfully employed.....	194	183	35	191.3	11	5.7
At home.....	58	58	7	.....	.....	.....
Away from home.....	136	125	28	224.0	11	8.1
Not reported.....	2	2	1	.....	.....	.....
Foreign-born mothers.....	1,066	1,041	191	183.5	54	4.9
Not gainfully employed.....	512	491	80	162.9	21	4.1
Gainfully employed.....	552	550	111	201.8	32	5.5
At home.....	214	209	33	157.9	5	2.3
Away from home.....	338	341	78	228.7	27	7.3
Not reported.....	1	.....	.....	.....	1	.....
French-Canadian mothers.....	610	574	129	224.7	36	5.9
Not gainfully employed.....	349	335	66	197.0	14	4.0
Gainfully employed.....	261	239	63	263.6	22	8.4
At home.....	75	73	14	.....	2	.....
Away from home.....	186	166	49	295.2	20	10.8
Other foreign-born mothers.....	485	467	62	132.8	18	3.7
Not gainfully employed.....	163	156	14	89.7	7	4.3
Gainfully employed.....	321	311	48	154.3	10	3.1
At home.....	139	136	19	139.7	3	2.2
Away from home.....	182	175	29	165.7	7	3.8
Not reported.....	1	.....	.....	.....	1	.....

¹ Not shown where base is less than 100.

Work during year after baby's birth.—It remains to be demonstrated whether or not the gainful employment of the mother during some part of the year following childbirth is an independent factor in the infant mortality rate. The mothers of 679 live-born infants were thus employed; among these infants occurred 150 deaths under 12 months of age. The infant mortality rate, therefore, for this group is 220.9 as compared with a rate of 122 for the babies whose mothers were not gainfully employed during any part of the year following childbirth. At first glance the wide difference between these rates seems conclusive evidence of the effect of the mother's gainful employment upon the well-being of the child. Several points, however, which weaken the comparative value of these rates must be considered.

In the first place, the group of gainfully employed mothers is composed of two widely different elements—those who worked at home and were not separated from their babies and those who worked away from home and were separated from their babies. Secondly, the mothers of 72 babies were not gainfully employed until after their babies had died. In no way, therefore, could the employment of these mothers have been a factor in their babies' deaths.

TABLE 32.

Employment of mother at home and away from home during year following baby's birth and baby's age when mother resumed gainful work away from home.	Live births during selected year and infant deaths.			
	Total live births.	Survived 1 year.	Infant deaths.	
			Number.	Infant mortality rate. ¹
All mothers.....	1,544	1,306	258	165.0
Not gainfully employed.....	885	777	108	122.0
Gainfully employed.....	679	529	150	220.9
Resumed after baby's death.....	72	.....	72	.....
Resumed during baby's life.....	603	529	74	122.7
No report of time resumed.....	4	.....	4	.....
Work at home.....	353	305	48	136.0
Resumed after baby's death.....	13	.....	13	.....
Resumed during baby's life.....	336	305	31	92.3
No report of time resumed.....	4	.....	4	.....
Work away from home.....	326	224	102	312.9
Resumed after baby's death.....	59	.....	59	.....
Resumed during baby's life.....	267	224	43	161.0
Baby's age when resumed:	.....	.....	.....	.....
Under 1 month.....	11	6	5	.....
1 month and under 2.....	34	22	12	.....
2 months and under 3.....	42	37	5	.....
3 months and under 4.....	33	21	11	.....
4 months and under 5.....	22	18	4	.....
5 months and under 6.....	31	28	3	.....
6 months or older.....	95	92	3	.....

¹ Not shown where base is less than 100.

If the 72 babies just referred to and the 4 whose ages when the mothers resumed work were not reported be eliminated from consideration, the infant mortality rate for the 603 babies whose mothers were gainfully employed while their babies were still alive is 122.7—a rate

almost identical with that for babies whose mothers were not gainfully employed.

The rate of 122.7 is made up of two rates—one of 92.3 for the babies whose mothers were gainfully employed at home during the baby's lifetime and one of 161 for those whose mothers were thus employed away from home. Evidently employment of the latter sort is the one, if either, to be considered a factor in infant mortality.

A careful examination of the original schedules discloses the fact that of the mothers who were gainfully employed outside the home while their babies were still alive not one was thus employed before the baby was at least 2 weeks old. The mortality rate, 161 for the babies of these mothers, is therefore a rate for a selected group of babies who survived at least 2 weeks and should be compared with the rate for the remaining babies who survived at least 2 weeks. In all, 1,508 infants survived at least 2 weeks—267 whose mothers went out to work while their babies were alive and 1,241 others. In this latter group occurred 159 subsequent infant deaths—a mortality rate of 128.1, which is markedly lower than the rate of 161 for the babies whose mothers were gainfully employed outside the home during the baby's lifetime.

Significance of mother's absence.—The evil effects of the mother's gainful employment away from home while the baby is alive lie primarily in depriving the child of the mother's care and in substituting artificial feeding for breast feeding. The younger the baby the more marked the effect. Of the 119 babies whose mothers worked away from home before the baby was 4 months of age, 33 died before the age of 1 year. The mortality rate was 277.3. Among all other live-born babies, 1,445 in number, there occurred 225 infant deaths—a mortality rate of 155.7. But since the 119 babies were part of a selected group which had survived at least 2 weeks, the full significance of the rate, 277.3, appears only when contrasted with the rate of 121.7 for the remainder of the group, namely, 1,389 babies who had survived at least 2 weeks. (See Table 33.)

Clearly, from these comparisons, so far as our data revealed the actual conditions in Manchester, the gainful employment of mothers away from home during some part of the year following childbirth was accompanied by a marked increase in the infant mortality rate, particularly in those cases where the mothers were thus employed within four months of childbirth.

TABLE 33.

Baby's age when mother resumed gainful work.	Infants whose mothers resumed work away from home during baby's life-time.		
	Total.	Infant deaths.	
		Number.	Infant mortality rate. ¹
All ages	267	43	161.0
Under 4 months	119	32	277.3
Under 1 month	11	5	.....
1 month and under 2	34	12	.....
2 months and under 3	42	5	.....
3 months and under 4	32	11	.....
4 months or older	148	10	67.6
4 months and under 5	22	4	.....
5 months and under 6	31	3	.....
6 months or older	95	3	.....

¹ Not shown where base is less than 100.

Mother's work and infant mortality in low-earnings group.—The gainful employment of mothers, as has been shown, is closely connected in Manchester with the inadequate earnings of the father, and the high infant mortality rate among babies of employed mothers may be due to the low economic status of the family. In order, therefore, to separate the effects of the one condition from the effects of the other, the data concerning the employment of mothers in the group where the father's earnings were under \$650 have been brought together in the following table.

TABLE 34.

Employment of mother during year following baby's birth, where father's earnings were under \$650.	Live births.	Infant deaths.	
		Number.	Infant mortality rate. ¹
All mothers	750	145	193.3
Mothers not gainfully employed	323	43	133.5
Mothers gainfully employed	428	102	239.3
After baby's death	46	46	.....
During baby's life	378	52	137.6
At home	181	21	116.0
Away from home	197	31	157.4
Time of resumption not specified	4	4	.....

¹ Not shown where base is less than 100.

From this table emerges the significant fact that within the same low-income group the babies whose mothers were gainfully employed away from home while their babies were alive had a notably higher infant mortality rate than those babies whose mothers were not gainfully employed during any part of the year following childbirth.

NATIVITY AND NATIONALITY.

Foreign element in city.—Manchester has a large foreign-born population in which the French-Canadian is the dominant group. The total population in 1910 according to the Federal census was 70,063, of which 29,692, or 42 per cent, were foreign-born white; 24,197, or 35 per cent, native white of foreign or mixed parentage, and only 16,119, or 23 per cent, native white of native parents. The French-Canadian was not far below the native stock, numbering 13,720, or 20 per cent of the total. Other foreign born found in any considerable numbers in 1910 were the Irish, 3,482; Canadians (other than French), 2,716; Germans, 1,225; and Greeks, 1,330. The last named and the Poles and Syrians are the newest immigrants and appear to be coming in increasing numbers.

The reports¹ of the Immigration Commission give the following account of the history of immigration to Manchester:

The character of the immigration to Manchester, N. H., like that of other cotton-manufacturing cities, has undergone considerable change within the past 20 years. Practically no Irish have come during that time, the English and Germans ceased to come in considerable numbers during the same period, and comparatively few French Canadians have arrived since the cessation of their enormous immigration 10 or 15 years ago.

The Irish immigration was very heavy after 1850 and again after 1870. They form at present by far the largest group of foreign-born, exclusive of Canadians. * * * French-Canadian immigration, beginning in large numbers in the late seventies and in the early part of the decade 1880-1890, has contributed by far the most important element of the foreign population. In 1900, 55 per cent of the foreign-born of Manchester were French Canadians, their number, even exclusive of the second generation, representing almost one-fourth of the total population of the city. * * *

The more recent immigrants, at present so important a factor in the mill population, began coming to Manchester 12 or 15 years ago. The Poles first entered the mills of the city about 1895, and are still arriving in considerable numbers. The Greeks and Bulgarians, together with a few Syrians and Turks, constitute the largest racial group now coming to the city.

Foreign-born mothers in this study.—Although the foreign born constituted only about 42 per cent of the total population, foreign-born mothers gave birth to about 67 per cent of the 1,643 infants.

Over half of the mothers of foreign birth were French Canadians. The number of births to this group was 610, or 37.1 per cent of the total. Polish mothers were next in numbers, giving birth to 170 children. Irish mothers contributed 92 births; Greek and Syrian, 72.

The last two races named live in the same colonies and have much the same habits; therefore they were combined for purposes of comparison. The same is true also of Ruthenian, Lithuanian, and Polish, and the number of births to this whole group was 192. English, Irish, and Scotch combined contributed 115 births. Other nationalities were less important in numbers. (See Table 15.)

¹ Reports of the Immigration Commission, vol. 10, p. 46, Washington, 1911.

French Canadians.—The French Canadians in Manchester form a prominent and distinct element in the city life. They have an intense feeling of nationality, shared even by their descendants of the first and second generations. Their impress upon the city is to be seen in the French names of many institutions, such as churches, convents, schools, hospitals, orphanages, and homes. Many of the streets in the predominantly French section bear French names, as, for example, Notre Dame, Cartier, Dubuque, Youville, Alsace, etc. French is the common language of the home, shop, and street in this section, and even the stores in the principal business sections employ French interpreters to receive customers' orders. There is one French daily newspaper in the city. It is significant that the only native mothers encountered in connection with this study who could not speak English were of French-Canadian descent; they numbered 42, or 7.7 per cent of the total native born.

The French Canadians in Manchester are generally thrifty, self-respecting people, ambitious to own their homes and to accumulate property. Despite their tendency to retain their language and a separate community life, they are found not only in the French quarter but in other sections of the city. They are also found in all occupations, though large numbers work in the textile mills. Their earnings here are higher as a rule than those of the newer immigrants, the Greeks, Syrians, and Poles, and on the whole they occupy a relatively favorable position among the foreign-born population in the community as regards both economic and social status.

Nationality and infant mortality.—The infant mortality rate among babies of native mothers was 128.1, while among babies of foreign-born mothers it was 183.5. The rate for babies born to French-Canadian mothers was 224.7, and the next highest rate was that among babies of Polish mothers—189. The lowest rate shown is that for babies of the English, Irish, and Scotch mothers; for this group it was only 66, a rate very much lower than that for babies of native mothers. These figures make apparent the disproportionately large number of deaths among babies born to French-Canadian mothers. There were 129 deaths in this group, and if these be eliminated the infant mortality rate for all other foreign-nationality groups combined falls from 183.5 to 132.8, and the rate for all babies considered from 165 to 130.3. (See Table 15.)

Economic status and size of family.—A larger proportion of the foreign-born mothers than of the native are found in the economic groups where father's earnings are lowest, and this difference in economic status is even more marked when the size of family is considered. In general the native born have larger earnings and smaller families than the foreign born. In the group of babies in which the fathers earned under \$650, of those with native mothers 15 per cent were in families of over four persons, while of babies with other foreign

mothers 28.4 per cent and of babies with French-Canadian mothers 42.5 per cent, were in such families. Similarly, among all with fathers earning under \$850 the percentages of the same three groups in families of more than four persons were 19.7, 30.8, and 41, respectively. Only 11 babies of native mothers were born in families of more than eight persons and two of these were in the earnings group under \$650. Of the babies born to foreign mothers 74 were in families of over eight persons, and 44 of these were in this low-income group.

TABLE 35.

Earnings of father and nativity of mother.	Average number ¹ of persons per family.	Births during selected year in—				
		All families.	Families of specified number ¹ of persons.			
			1 to 4.		Over 4.	
			Num-ber.	Per-cent.	Num-ber.	Per-cent.
All mothers.....	4.0	1,643	1,132	68.9	510	31.0
Under \$450.....	3.8	225	163	72.4	62	27.6
\$450 to \$549.....	4.2	274	183	66.8	91	33.2
\$550 to \$649.....	3.9	297	205	69.0	92	31.0
\$650 to \$849.....	4.1	426	283	66.4	143	33.6
\$850 to \$1,049.....	3.9	199	144	72.4	55	27.6
\$1,050 to \$1,249.....	4.2	72	48	66.7	24	33.3
\$1,250 and over.....	3.6	105	78	74.3	27	25.7
No earnings ²	3.6	24	16	66.7	7	29.2
Not reported.....	4.2	21	12	57.1	9	42.9
Native mothers.....	3.3	548	444	81.0	103	18.8
Under \$450.....	3.4	29	24	82.8	5	17.2
\$450 to \$549.....	3.2	59	51	86.4	8	13.6
\$550 to \$649.....	3.1	92	78	84.8	14	15.2
\$650 to \$849.....	3.7	160	120	75.0	40	25.0
\$850 to \$1,049.....	3.3	100	83	83.0	17	17.0
\$1,050 to \$1,249.....	3.3	36	30	83.3	6	16.7
\$1,250 and over.....	3.2	63	52	82.5	11	17.5
No earnings ²	1.0	5	4	80.0	1	20.0
Not reported.....	3.8	4	2	50.0	2	50.0
Foreign-born mothers.....	4.3	1,095	688	62.8	407	37.2
Under \$450.....	3.8	196	139	70.9	57	29.1
\$450 to \$549.....	4.5	215	132	61.4	83	38.6
\$550 to \$649.....	4.3	205	127	62.0	78	38.0
\$650 to \$849.....	4.4	266	163	61.3	103	38.7
\$850 to \$1,049.....	4.5	99	61	61.6	38	38.4
\$1,050 to \$1,249.....	5.1	36	18	50.0	18	50.0
\$1,250 and over.....	4.1	42	26	61.9	16	38.1
No earnings ²	4.2	19	12	63.2	7	36.8
Not reported.....	4.3	17	10	58.8	7	41.2
French-Canadian mothers.....	4.6	610	355	58.2	255	41.8
Under \$450.....	4.3	52	32	61.5	20	38.5
\$450 to \$549.....	5.0	121	65	53.7	56	46.3
\$550 to \$649.....	4.6	133	79	59.4	54	40.6
\$650 to \$849.....	4.4	177	108	61.6	68	38.4
\$850 to \$1,049.....	4.8	68	39	57.4	29	42.6
\$1,050 to \$1,249.....	6.0	18	6	33.3	12	66.7
\$1,250 and over.....	4.4	22	13	59.1	9	40.9
No earnings ²	3.4	10	7	70.0	3	30.0
Not reported.....	4.7	9	5	55.6	4	44.4
Other foreign-born mothers.....	3.9	485	333	68.7	152	31.3
Under \$450.....	3.7	144	107	74.3	37	25.7
\$450 to \$549.....	3.8	94	67	71.3	27	28.7
\$550 to \$649.....	3.9	72	48	66.7	24	33.3
\$650 to \$849.....	4.4	89	54	60.7	35	39.3
\$850 to \$1,049.....	3.9	31	22	71.0	9	29.0
\$1,050 to \$1,249.....	4.2	18	12	66.7	6	33.3
\$1,250 and over.....	3.8	20	13	65.0	7	35.0
No earnings ²	5.0	9	5	55.6	4	44.4
Not reported.....	3.9	8	5	62.5	3	37.5

¹ Baby born during selected year not included in number.

² Includes 1 father living on his income.

Economic status of French Canadians and others.—The high infant mortality rates found among foreign born are accompanied in general by low earnings of the father. Among the French Canadians, however, the father's earnings were in general higher than among other foreign born. For example, of the births to French-Canadian mothers only 8.5 per cent occurred in the economic class where the father's earnings were less than \$450, while of the births to other foreign mothers 29.7 per cent were in this class. Half of the babies of French-Canadian mothers belonged to families where the father's earnings were less than \$650, but practically two-thirds of the babies of other foreign-born mothers belonged to such families. The infant death rates among both the French Canadians and the other foreign born show in general a decline with rise in father's earnings, but the death rates for the babies of French-Canadian mothers within each economic class are higher than the rates for others in the same class.

Employment of foreign-born mothers.—A classification of the babies born to French-Canadian mothers and to other foreign-born mothers on the basis of gainful employment of the mother the year after childbirth and according to father's earnings reveals a smaller extent of gainful employment among French-Canadian mothers. Of the whole number of babies of French-Canadian mothers, 41.5 per cent had mothers who worked the year following childbirth as compared with 62.3 per cent of the babies of other foreign mothers who worked during this period. In the lowest economic class, where the father's earnings were less than \$450 per annum, the percentage of babies whose mothers worked the year following childbirth was 55.8 in the French-Canadian group and 83.3 in the group of other foreign-born. Though the proportion of mothers gainfully employed declines in both groups, generally with the rise of father's earnings the proportion of mothers who work is less among the French Canadians than among the other foreign born. (See Table 28.)

Gainful employment of the mothers during the year preceding childbirth is also found to a less extent among the French-Canadian mothers. Of the births to French-Canadian mothers 42.8 per cent were to mothers who had worked the year previous to confinement, while 66.2 per cent of the births to other foreign-born mothers were to mothers who had worked in this year. (See Table 31.)

The infant mortality rate, as has been shown, in general is higher among babies of mothers gainfully employed than among babies of mothers not so employed. The contrast between those whose mothers work away from home and others is particularly marked, but in all cases the babies of French-Canadian mothers die at a much higher rate than babies of other foreign-born mothers.

Despite then the smaller extent of gainful employment among the French-Canadian mothers and the higher economic status of the families, counterbalanced in part, it is true, by the larger size, infant death rates in all subclasses compared are so much higher among babies of French-Canadian mothers than among babies of other foreign-born mothers that a much higher rate for the French-Canadian group as a whole is obtained.

Ability to speak English.—Among the foreign born inability to speak English is generally regarded as a handicap which puts them at a disadvantage economically and socially and so tends toward a lower standard of living. It usually indicates a lack of means for securing knowledge of the proper care of the baby and of the medical resources of the community as a whole, in that the non-English speaking are more or less limited in their choice of doctors and nurses and of other social, medical, and educational resources of the community. But these conditions do not operate equally regardless of nationality; in Manchester lack of a knowledge of English would be naturally less disadvantageous to the French Canadians than to others, as the former are such a definitely independent element in the population.

Ability of mother to speak English.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent. ¹
			Number.	Infant mortality rate. ¹		
All mothers.....	1,643	1,564	258	165.0	79	4.8
Able to speak English.....	975	922	126	136.7	53	5.4
Unable to speak English ²	667	641	132	206.9	26	3.9
Not reported.....	1	1				
Foreign-born mothers.....	1,095	1,041	191	183.5	54	4.9
English-speaking nationalities ³	129	120	9	75.0	9	7.0
Non-English speaking nationalities.....	966	921	182	197.6	45	4.7
Able to speak English.....	341	321	60	186.9	20	5.9
Unable to speak English.....	625	600	122	203.3	25	4.0
French-Canadian mothers.....	610	574	129	224.7	36	5.9
Able to speak English.....	249	231	50	216.5	18	7.2
Unable to speak English.....	361	343	79	230.3	18	5.0
Other foreign-born mothers.....	356	347	53	152.7	9	2.5
Able to speak English.....	92	90	10		2	
Unable to speak English.....	264	257	43	167.3	7	2.7

¹ Not shown where base is less than 100.

² Includes 42 native mothers.

³ English, Irish, Scotch, and Canadian except French.

A classification of foreign-born mothers of non-English speaking nationalities according to ability to speak English reveals the fact

that the French-Canadian mothers, who are longer resident in this country than other foreign-born mothers, had acquired the language to a greater degree than the others. Of the 610 babies born to French-Canadian mothers 249, or 40.8 per cent, had mothers able to speak English, while of the babies of other non-English speaking foreign-born mothers but 92, or 25.8 per cent, had such mothers. Forty-two native mothers spoke French only.

The rate among babies of all mothers (native and foreign-born) able to speak English was 136.7, while that of babies whose mothers could not speak the language was 205.9. The infant death rate for babies of both French-Canadian and other non-English speaking foreign-born mothers was higher where the mother could not speak English than where she could.

Years in United States.—The infant death rate for babies of all foreign-born mothers who had been in this country 5 years or less was 248.8, while that for babies of mothers who had lived here over 5 years was 165.7. On the other hand, the French-Canadian, among whom the highest infant death rate was found, was the foreign group which had been in this country longest. Only 14.9 per cent of all babies of French-Canadian mothers were born to those who had lived in the United States 5 years or less; whereas 27.5 per cent of babies of other foreign-born mothers were born to those who had lived in the United States for that period. Nearly half of the French-Canadian mothers had been in this country over 15 years. The infant death rate was higher, however, among the more recently arrived French Canadians than among those who had been in the United States for 12 years or more.

TABLE 37.

Years in the United States.	Births during selected year to foreign-born mothers and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent. ¹
			Number.	Infant mortality rate. ¹		
All foreign-born mothers.....	1,005	1,041	191	183.5	54	4.9
Less than 3 years.....	44	43	9		1	
3 to 5 years.....	180	174	45	258.6	6	3.3
6 to 8 years.....	165	160	24	150.0	5	3.0
9 to 11 years.....	138	132	29	219.7	6	4.3
12 to 15 years.....	183	176	24	136.4	7	3.8
16 years and more.....	381	353	59	167.1	28	7.3
Not reported.....	4	3	1		1	
French-Canadian mothers.....	610	574	129	224.7	36	5.9
Less than 3 years.....	14	13	5		1	
3 to 5 years.....	77	74	24		3	
6 to 8 years.....	68	65	14		3	
9 to 11 years.....	55	52	16		3	
12 to 15 years.....	108	103	19	184.5	5	4.6
16 years and more.....	285	265	50	188.7	20	7.0
Not reported.....	3	2	1		1	
Other foreign-born mothers.....	485	467	62	132.8	18	3.7
Less than 3 years.....	30	30	4			
3 to 5 years.....	103	100	21	210.0	3	2.9
6 to 8 years.....	97	95	10		2	
9 to 11 years.....	83	80	13		3	
12 to 15 years.....	75	73	5		2	
16 years and more.....	96	88	9		8	
Not reported.....	1	1				

¹ Not shown where base is less than 100.

TABLE 38.

Nationality of mother.	Births during selected year to foreign-born mothers.							
	Total.	In United States specified number of years.						
		Under 3.	3 to 5.	6 to 8.	9 to 11.	12 to 15.	16 and over.	Not reported.
All foreign-born mothers.....	1,005	44	180	165	138	183	381	4
Canadian, French.....	610	14	77	68	55	108	285	3
Polish.....	170	7	41	51	39	24	8	
English, Irish, and Scotch.....	115	1	7	11	17	27	52	
Greek and Syrian.....	72	14	37	12	8	1		
All other.....	127	8	18	23	19	23	35	1
Not reported.....	1						1	

PER CENT DISTRIBUTION.

All foreign-born mothers.....	100.0	4.0	16.4	15.1	12.6	16.7	34.8	0.4
Canadian, French.....	100.0	2.3	12.6	11.1	9.0	17.7	46.7	.5
Polish.....	100.0	4.1	24.1	30.0	22.9	14.1	4.7	
English, Irish, and Scotch.....	100.0	.9	6.1	9.6	14.8	28.5	45.2	
Greek and Syrian.....	100.0	19.4	51.4	16.7	11.1	1.4		
All other.....	100.0	6.3	14.2	18.1	15.0	18.1	27.6	.8

Literacy.—Literacy in Manchester showed almost as close a relation to foreign birth as ability to speak English, for out of a total of 286 babies born to mothers who were illiterate only 25 were babies of native mothers. In the case of literacy again a peculiar situation exists with reference to the French Canadians, for although illiteracy in general is accompanied by a high infant death rate, in the French-Canadian group the infant death rate for all babies was 224.7, and for babies of literate mothers the rate was practically identical, namely 223.3. The difference in the infant mortality rates on the basis of the literacy of mothers was chiefly confined to the group of other foreign born. Here the rate was only 94.6 for babies of literate mothers but rose to 198.8 for babies of illiterate mothers. The French-Canadian mothers were more generally literate than the other foreign-born mothers, 85.9 per cent being so classed as compared with 63.9 per cent of the other foreign born.

TABLE 39.

Literacy ¹ of mother.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent. ²
			Number.	Infant mortality rate. ³		
All mothers.....	1,643	1,564	258	165.0	79	4.8
Literate.....	1,355	1,291	200	154.9	64	4.7
Illiterate ³	286	271	58	214.0	15	5.2
Not reported.....	2	2				
Foreign-born mothers.....	1,095	1,041	191	183.5	54	4.9
Literate.....	834	793	139	175.3	41	4.9
Illiterate.....	261	248	52	209.7	13	5.0
French-Canadian mothers.....	610	574	129	224.7	36	5.9
Literate.....	524	497	111	223.3	27	5.2
Illiterate.....	86	77	18		9	
Other foreign-born mothers.....	485	467	62	132.8	18	3.7
Literate.....	310	296	28	94.6	14	4.5
Illiterate.....	175	171	34	198.8	4	2.3

¹ Persons who can read and write in any language are reported literate.

² Not shown where base is less than 100.

³ Includes 25 native mothers.

Conditions peculiar to French Canadians.—Since those conditions which have been shown to be factors in a high infant mortality rate exist to practically no greater extent among the French Canadians than among the other groups, the reasons for the excessive infant mortality rate among the babies of French-Canadian mothers must be sought, perhaps, in conditions of living that are peculiar to this group.

Lack of Americanization—that is, retention of a foreign language and maintenance of such distinct channels of expression as separate schools, churches, orphanages, political and pleasure clubs, as well as a daily paper printed in a foreign language—may tend to narrow and limit that opportunity for contact which might have an educational value along hygienic and other lines. But this question was not pursued far enough to justify any positive conclusion as to its importance in retarding the development of the French Canadians. In any case these social conditions would affect the baby largely as they modified customs within the home itself.

In their method of feeding and in the size of their families the French Canadians show distinctive conditions which may account partly for the difference between their infant mortality rate and the rates of other groups of foreign born.

FEEDING.

Feeding and infant mortality.—Method of feeding is among the factors immediately related to infant mortality. Feeding is often the primary means through which the less direct factors, such as employment of mothers away from home and low income with insufficient food and rest for the mother, exert their influence. The mother's intelligence and care are also reflected in the baby's feeding, although the mother's ignorance is itself often but the consequence of low economic status and early entrance into gainful employment. The importance of feeding to infant welfare is universally acknowledged, and authorities are also agreed in emphasizing the great superiority of breast feeding to any substitute for mother's milk.

Of the 1,643 babies included in this report, 1,564 were live born, and of this number 1,535 survived long enough to be fed. Upon this latter group, then, the study of feeding is based. Only the first nine months were taken into account in the study of feeding, because as a rule breast feeding after that period is not necessary to the baby's welfare.

Effects of feeding in each month of age.—The chances of survival for babies deprived of breast milk at an early age are decidedly less than those for babies nursed for a longer period. A comparison of the babies being breast fed and those being artificially fed any month up to the ninth reveals the fact that the percentage who failed to survive infancy was from two to five times as high among babies being artificially fed as among those receiving breast milk exclusively. (See Table 40.)

TABLE 40.

Infants born during selected year and surviving at beginning of specified month.

Month of life and type of feeding.	All mothers.				Native mothers.				Foreign-born mothers.			
	Total.	Died in—			Total.	Died in—			Total.	Died in—		
		First year.		Specified month.		First year.		Specified month.		First year.		Specified month.
		Number.	Per cent.			Number.	Per cent.			Number.	Per cent.	
First month.....	1,564	268	16.5	72	528	67	12.8	16	1,041	191	18.3	55
Breast exclusively.....	1,238	148	12.0	26	420	38	9.0	6	818	110	13.4	20
Mixed.....	87	15	26.3	3	15	1	6.7		42	14	33.3	3
Artificial exclusively.....	238	66	27.7	14	82	22	26.8	4	156	44	28.2	10
Not fed, died at once.....	29	29		29	6	6		6	23	23		23
Not reported.....	2								2			
Second month.....	1,492	186	12.5	24	807	51	10.1	4	985	135	13.7	20
Breast exclusively.....	1,067	92	8.6	12	353	22	6.2	1	714	70	9.8	11
Mixed.....	90	18	20.0	2	25	1	4.0		65	17	26.2	2
Artificial exclusively.....	333	76	22.8	10	129	28	21.7	3	204	48	23.5	7
Not reported.....	2								2			
Third month.....	1,468	162	11.0	24	808	47	9.3	4	965	115	11.9	20
Breast exclusively.....	910	53	5.8	9	305	14	4.6	1	605	39	6.4	8
Mixed.....	129	24	18.6	4	33	3	9.1		96	21	21.9	4
Artificial exclusively.....	427	85	19.9	11	165	30	18.2	3	262	55	21.0	8
Not reported.....	2								2			
Fourth month.....	1,444	138	9.6	18	499	43	8.6	7	945	95	10.1	11
Breast exclusively.....	742	31	4.2	6	260	7	2.8	3	492	24	4.9	3
Mixed.....	184	21	11.4	2	48	5	10.4		136	16	11.8	2
Artificial exclusively.....	516	86	16.7	10	201	31	15.4	4	315	55	17.5	6
Not reported.....	2								2			
Fifth month.....	1,426	120	8.4	18	492	36	7.3	5	934	84	9.0	12
Breast exclusively.....	633	17	2.7		211	2	.9		422	15	3.6	
Mixed.....	229	22	9.6	4	63	4	6.3		166	18	10.8	4
Artificial exclusively.....	562	81	14.4	14	218	30	13.8	5	344	51	14.8	9
Not reported.....	2								2			
Sixth month.....	1,408	102	7.2	21	487	31	6.4	10	921	71	7.7	11
Breast exclusively.....	528	14	2.7	3	174	1	.6	1	349	13	3.7	2
Mixed.....	281	20	7.1	5	81	4	4.9	3	200	16	8.0	2
Artificial exclusively.....	602	68	11.3	13	282	26	11.2	6	370	42	11.4	7
Not reported.....	2								2			
Seventh month.....	1,387	81	5.8	18	477	21	4.4	5	910	60	6.6	12
Breast exclusively.....	386	10	2.6	1	125				261	10	3.8	1
Mixed.....	354	14	4.0	2	107				247	14	5.7	2
Artificial exclusively.....	645	57	8.8	15	245	21	8.6	5	400	36	9.0	10
Not reported.....	2								2			
Eighth month.....	1,369	63	4.6	11	472	16	3.4	3	897	47	5.2	8
Breast exclusively.....	314	6	1.9		98				216	6	2.8	
Mixed.....	391	13	3.3	2	122				269	13	4.8	2
Artificial exclusively.....	662	44	6.6	9	262	16	6.3	3	410	28	6.8	6
Not reported.....	2								2			
Ninth month.....	1,358	52	3.8	20	469	13	2.8	6	889	39	4.4	14
Breast exclusively.....	247	5	2.0	1	79				168	5	3.0	1
Mixed.....	410	9	2.2	3	129				281	9	3.2	3
Artificial exclusively.....	699	38	5.4	16	261	13	5.0	6	438	25	5.7	10
Not reported.....	2								2			

The total number of babies who were breast fed exclusively during their first month was 1,238, and of these 12 per cent failed to survive till the end of the year. Among the 238 babies who were artificially

fed during this month, however, 27.7 per cent died before the end of the year. There were 1,492 babies who survived until the beginning of the second month; 1,067 of these were breast fed during this month and 333 received no breast milk whatever. In the former group only 8.6 per cent died before the end of the year, while in the latter group, babies being artificially fed during the second month, 22.8 per cent failed to survive infancy. The percentages of infant deaths for the two groups, according to feeding in the third month, were 5.8 and 19.9, respectively, and for the succeeding months similar differences in the proportion of infant deaths in each group appear. At the beginning of the ninth month there were 1,358 babies living, of whom 247 were nursed exclusively in this month and 699 were artificially fed. In the first group 2 per cent died before reaching 12 months, while 5.4 per cent of the second group failed to live to that age. The difference in rates here, of course, can not be attributed to the relative influence of breast and artificial feeding at 9 months. But effects of both types of feeding are cumulative, and at any period during infancy they show in the subsequent death rates among the survivors. Not only the feeding being given during any specified month but also the feeding during all or a part of the preceding months of the child's life cause the difference in death rates later.

The above comparisons are between breast feeding exclusively and artificial feeding exclusively during various periods of the first 9 months. The influence of mixed feeding—that is, part breast milk and part other food—upon the infant death rate is less pronounced. Babies whose feeding was mixed, in all groups compared, died in less numbers relatively than those being artificially fed and in greater numbers relatively than those being breast fed. In the early months exclusive breast feeding appears to be of most importance to a baby's welfare, for during this period the percentage of infant deaths among babies whose feeding is mixed more closely approaches that for babies being artificially fed than that for babies being exclusively breast fed. After the sixth month the reverse is practically true, and in the ninth month the advantage of exclusive breast feeding over mixed feeding, so far as it is indicated by the infant death rates, almost disappears.

A somewhat sharper contrast in the effects of feeding as indicated by death rates appears if we consider all babies alive at specified ages who had received a single type of feeding during their entire life up to that age. Of the infants alive at the end of 3 months only 4.9 per cent of those who had been breast fed up to that time died later under 1 year of age, while those who had been fed otherwise died at from more than two to nearly four times this rate. Of the infants who had been breast fed exclusively during the first 6 months of life only 2.1 per cent died under 1 year of age, as compared with per-

centages about six times as great for those who had had either mixed or artificial feeding during the same period. At the end of 9 months there were 244 infants who had had only breast milk and 177 who had never had it; 1.6 per cent of the first group and 3.4 per cent of the second subsequently died under 1 year of age.

TABLE 41.

Infants born during selected year and surviving at specified time.

Type of feeding, age of infant, and nativity of mother.	Died later in year.											
	Total.		In specified month of age.									
	Total.	Number.	Per cent.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth.
ALL MOTHERS. ¹												
Type of feeding:												
At 3 months of age.....	1,442	138	9.6	18	18	21	18	11	20	11	9	12
Breast.....	901	44	4.9	6	2	11	7	2	4	2	4	6
Mixed.....	125	20	16.0	2	4	1	1	1	4	3	2	3
Artificial.....	416	74	17.8	10	12	9	10	8	12	6	3	4
During first 3 months.....	1,442	138	9.6	18	18	21	18	11	20	11	9	12
Breast exclusively.....	900	44	4.9	6	2	11	7	2	4	2	4	6
Mixed exclusively.....	41	5	12.2	1	1	3	8	4	6	1	1	1
Artificial exclusively.....	206	35	17.0	3	5	3	2	5	10	3	3	3
More than one type.....	296	54	18.3	9	10	7	2	5	10	5	3	3
At 6 months of age.....	1,385	81	5.8				18	11	20	11	9	12
Breast.....	620	11	2.1				2	1	1	1	3	4
Mixed.....	276	15	5.4				2	2	3	2	2	4
Artificial.....	589	65	9.3				15	8	16	8	4	4
During first 6 months.....	1,385	81	5.8				18	11	20	11	9	12
Breast exclusively.....	518	11	2.1				1	1	1	1	3	4
Mixed exclusively.....	31	4	12.9				1	1	2	1	1	1
Artificial exclusively.....	195	24	12.3				8	4	6	3	1	2
More than one type.....	641	42	6.6				8	6	13	6	4	5
At 9 months of age.....	1,336	33	2.4							11	9	12
Breast.....	246	4	1.6							3	2	2
Mixed.....	407	6	1.5							9	7	6
Artificial.....	683	22	3.2							9	7	6
During first 9 months.....	1,336	33	2.4							11	9	12
Breast exclusively.....	244	4	1.6							3	2	2
Mixed exclusively.....	25	2	8.0							1	1	1
Artificial exclusively.....	177	6	3.4							3	3	2
More than one type.....	890	20	2.2							7	6	7
NATIVE MOTHERS.												
Type of feeding:												
At 3 months of age.....	499	43	8.6	7	5	10	5	3	6	3	2	3
Breast.....	304	13	4.3	3	1	5	2			1	1	
Mixed.....	33	3	9.1							1	1	
Artificial.....	162	27	16.7	4	4	4	3	3	6	1	2	2
During first 3 months.....	499	43	8.6	7	5	10	5	3	6	3	2	3
Breast exclusively.....	304	13	4.3	3	1	5	2			1	1	
Mixed exclusively.....	10											
Artificial exclusively.....	74	14	18.9		3	2	2	1	4	1		1
More than one type.....	111	16	14.4	4	1	3	1	2	2	1	1	1
At 6 months of age.....	477	21	4.4				5	3	6	3	2	3
Breast.....	173											
Mixed.....	78	1	1.3								1	
Artificial.....	226	20	8.8				5	3	6	3	1	3
During first 6 months.....	477	21	4.4				5	3	6	3	2	3
Breast exclusively.....	173											
Mixed exclusively.....	6											
Artificial exclusively.....	69	9	13.0				2	1	4	1		1
More than one type.....	229	12	5.2				2	2	2	2	2	1
At 9 months of age.....	463	7	1.5							3	2	3
Breast.....	79											
Mixed.....	129											
Artificial.....	255	7	2.7							3	2	3
During first 9 months.....	463	7	1.5							3	2	3
Breast exclusively.....	78											
Mixed exclusively.....	6											
Artificial exclusively.....	62	2	3.2							1		1
More than one type.....	317	5	1.6							2	2	1

¹ Excluding 2 infants surviving 1 year for whom feeding was not reported.

INFANT MORTALITY.

67

TABLE 41—Continued.

Infants born during selected year and surviving at specified time.

Type of feeding, age of infant, and nativity of mother.	Died later in year.											
	Total.		In specified month of age.									
	Total.	Number.	Per cent.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth.
FOREIGN-BORN MOTHERS.¹												
Type of feeding:												
At 3 months of age.....	943	95	10.1	11	13	11	13	8	14	8	7	10
Breast.....	597	31	5.2	3	1	6	5	2	4	1	3	6
Mixed.....	92	17	18.5	2	4	1	1	1	4	2	1	2
Artificial.....	254	47	18.5	6	8	5	7	5	6	5	3	2
During first 3 months.....	943	95	10.1	11	13	11	13	8	14	8	7	10
Breast exclusively.....	596	31	5.2	3	1	6	5	2	4	1	3	6
Mixed exclusively.....	31	5	16.1	1	1	1	1	1	1	1	1	1
Artificial exclusively.....	132	21	15.9	3	2	1	6	3	2	2	1	1
More than one type.....	184	38	20.7	5	9	4	1	3	8	4	2	2
At 6 months of age.....	908	60	6.6				13	8	14	8	7	10
Breast.....	347	11	3.2				1	1	1	1	3	4
Mixed.....	198	14	7.1				2	2	3	2	1	4
Artificial.....	363	35	9.6				10	5	10	5	3	2
During first 6 months.....	908	60	6.6				13	8	14	8	7	10
Breast exclusively.....	345	11	3.2				1	1	1	1	3	4
Mixed exclusively.....	25	4	16.0				1	1	1	1	1	1
Artificial exclusively.....	126	15	11.9				6	3	2	2	1	1
More than one type.....	412	30	7.3				5	4	11	4	2	4
At 9 months of age.....	873	25	2.9							8	7	10
Breast.....	167	4	2.4								2	2
Mixed.....	278	6	2.2							2		4
Artificial.....	428	15	3.5							6	5	4
During first 9 months.....	873	25	2.9							8	7	10
Breast exclusively.....	166	4	2.4								2	2
Mixed exclusively.....	19	2	10.5							1		1
Artificial exclusively.....	115	4	3.5							2	1	1
More than one type.....	573	15	2.6							5	4	6
<i>French-Canadian mothers.</i>												
Type of feeding:												
At 3 months of age.....	511	66	12.9	10	9	7	13	5	9	5	3	5
Breast.....	269	18	6.7	3	1	3	5	3	3	1	1	2
Mixed.....	43	11	25.6	1	2	1	1	1	2	1	1	2
Artificial.....	199	37	18.6	6	6	4	7	4	4	4	1	1
During first 3 months.....	511	66	12.9	10	9	7	13	5	9	5	3	5
Breast exclusively.....	269	18	6.7	3	1	3	5	3	3	1	1	2
Mixed exclusively.....	15	4	26.7	1	1	1	1	1	1	1	1	1
Artificial exclusively.....	106	16	15.1	3	2	1	6	2	1	1	1	1
More than one type.....	121	28	23.1	4	6	3	1	3	5	3	1	2
At 6 months of age.....	485	40	8.2				13	5	9	5	3	5
Breast.....	138	4	2.9				1	1	1	1	1	2
Mixed.....	71	8	11.3				2	1	1	1	1	2
Artificial.....	276	28	10.1				10	4	8	4	1	1
During first 6 months.....	485	40	8.2				13	5	9	5	3	5
Breast exclusively.....	138	4	2.9				1	1	1	1	1	2
Mixed exclusively.....	14	4	28.6				1	1	1	1	1	1
Artificial exclusively.....	100	10	10.0				6	2	1	1	1	1
More than one type.....	233	22	9.4				5	3	8	3	1	2
At 9 months of age.....	458	13	2.8							5	3	5
Breast.....	58	1	1.7									1
Mixed.....	86	3	3.5							1		2
Artificial.....	314	9	2.9							4	3	2
During first 9 months.....	458	13	2.8							5	3	5
Breast exclusively.....	58	1	1.7									1
Mixed exclusively.....	8	2	25.0							1		1
Artificial exclusively.....	91	1	1.1							1		1
More than one type.....	301	9	3.0							3	3	3
<i>Other foreign-born mothers.¹</i>												
Type of feeding:												
At 3 months of age.....	432	29	6.7	1	4	4	3	5	3	4	4	5
Breast.....	328	13	4.0			3	2	1	1	1	2	4
Mixed.....	49	6	12.2	1	2	1	1	1	2	1	1	1
Artificial.....	55	10	18.2	1	2	1	1	2	1	1	2	1

¹ Excluding 2 infants surviving 1 year for whom feeding was not reported.

TABLE 41—Continued.

Type of feeding, age of infant, and nativity of mother.	Infants born during selected year and surviving at specified time.											
	Died later in year.											
	Total.		In specified month of age.									
	Total.	Number.	Per cent.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth.
FOREIGN-BORN MOTHERS—continued.												
<i>Other foreign-born mothers—Continued.</i>												
Type of feeding—Continued.												
During first 3 months.....	432	29	6.7	1	4	4	3	5	3	4	5	
Breast exclusively.....	327	13	4.0			3	2	1	1	2	4	
Mixed exclusively.....	16	1	6.3		1							
Artificial exclusively.....	26	5	19.2				1	1	1	1	1	
More than one type.....	63	10	15.9	1	3	1		3	3	1	1	
At 6 months of age.....	423	20	4.7				3	5	3	4	5	
Breast.....	209	7	3.3				1	1	1	2	2	
Mixed.....	127	6	4.7				1	2	1	2	3	
Artificial.....	87	7	8.0				1	2	1	2	1	
During first 6 months.....	423	20	4.7				3	5	3	4	5	
Breast exclusively.....	207	7	3.4				1	1	1	2	2	
Mixed exclusively.....	11											
Artificial exclusively.....	26	5	19.2				1	1	1	1	1	
More than one type.....	179	8	4.5				1	3	1	1	2	
At 9 months of age.....	415	12	2.9						3	4	5	
Breast.....	109	3	2.8							2	1	
Mixed.....	192	3	1.6						1		2	
Artificial.....	114	6	5.3						2	2	2	
During first 9 months.....	415	12	2.9						3	4	5	
Breast exclusively.....	108	3	2.8							2	1	
Mixed exclusively.....	11											
Artificial exclusively.....	24	3	12.5						1	1	1	
More than one type.....	272	6	2.2						2	1	3	

Feeding methods and nationality.—The practice in regard to breast feeding varied according to nationality, economic status, and gainful employment of the mother. On the whole, foreign-born mothers other than French-Canadian nursed their babies longest. At the end of three months 75.9 per cent of foreign-born mothers except French-Canadian, 60.9 per cent of native mothers, and 52.6 per cent of French-Canadian mothers were exclusively breast feeding their babies. At the end of 6 months these percentages were 49.4, 36.3, and 28.5, respectively. At 9 months the contrast is similar, and in addition at each of these periods the foreign-born mothers other than French-Canadian much more commonly than either of the other classes of mothers were using a mixed diet for their babies. No doubt the great extent of exclusively artificial feeding among babies of French-Canadian mothers is a large factor in accounting for their high infant death rate.

If instead of considering the type of feeding at the end of these three age periods we consider the type during the same periods, we find the same tendency in the different groups, and as far as breast feeding is concerned almost identical percentages in each case.

TABLE 42.

Type of feeding and age of infant.	Per cent distribution of infants of —		
	Native mothers.	Foreign-born mothers.	
		French-Canadian.	Other.
Type of feeding:			
At 3 months of age.....	100.0	100.0	100.0
Breast.....	60.9	52.6	75.9
Mixed.....	6.6	8.4	11.3
Artificial.....	32.5	38.9	12.7
During first 3 months.....	100.0	100.0	100.0
Breast exclusively.....	60.9	52.6	75.7
Mixed exclusively.....	2.0	2.9	3.7
Artificial exclusively.....	14.8	20.7	6.0
More than one type.....	22.2	23.7	14.6
At 6 months of age.....	100.0	100.0	100.0
Breast.....	36.3	28.5	49.4
Mixed.....	16.4	14.6	30.0
Artificial.....	47.4	56.9	20.6
During first 6 months.....	100.0	100.0	100.0
Breast exclusively.....	36.3	28.5	48.9
Mixed exclusively.....	1.3	2.9	2.6
Artificial exclusively.....	14.5	20.6	6.1
More than one type.....	48.0	48.0	42.3
At 9 months of age.....	100.0	100.0	100.0
Breast.....	17.1	12.7	26.3
Mixed.....	27.9	18.8	46.3
Artificial.....	55.1	68.6	27.5
During first 9 months.....	100.0	100.0	100.0
Breast exclusively.....	16.8	12.7	26.0
Mixed exclusively.....	1.3	1.7	2.7
Artificial exclusively.....	13.4	19.9	5.8
More than one type.....	68.5	65.7	65.5

An analysis of the relation of type of feeding to infant mortality according to nationality shows practically no difference in results. The same tendency for a high infant mortality rate to accompany artificial feeding occurs among the babies of both native and foreign-born mothers. As might be expected from the higher general rate, the babies of foreign-born mothers show in nearly all cases, whatever the type of feeding, a higher death rate than babies of native mothers. (See Table 40.)

Feeding methods in economic groups.—Native and foreign-born mothers in the same economic classes do not show the same tendencies with reference to the baby's feeding. For the purpose of simplifying the comparison, economic classes were reduced to three—fathers earning under \$650, fathers earning from \$650 to \$1,049, and fathers earning \$1,050 and over. Among native mothers artificial feeding existed to the greatest extent in the poorest class and the percentage of babies artificially fed declined with the rise in father's earnings. Of babies of native mothers 35.4 per cent were artificially fed at 3 months of age in the class where the father's earnings were under \$650; 30.8 per cent where the earnings were \$650 to \$1,049; and 28.1 per cent where the earnings were \$1,050 and over. In contrast to this, among babies of the same age of foreign-born mothers 23.6 per cent were being artificially fed in the

class where father's earnings were under \$650; 31.8 per cent in the next higher class; and 26.4 per cent in the highest economic group, where father's earnings were \$1,050 and over. An analysis of the feeding given at 6 months according to nativity of mother and earnings of father reveals a similar situation.

Among foreign-born mothers, then, the poorest mothers nurse their babies to the greatest extent, and the mothers in the middle economic class nurse their babies least. French-Canadian mothers should be excepted from this generalization since, as has been shown, their general custom in regard to nursing the baby differs radically from that of other foreign-born mothers. Among the Polish mothers the extent of artificial feeding is almost negligible.

TABLE 43.

TABLE 43. Infants living and artificially fed at specified age and nationality of mother.	Infants born during selected year.					
	Total.	Whose fathers earned specified amount.				
		Under \$650.	\$650 to \$1,049.	\$1,050 and over.	No earn- ings. ¹	Not re- ported.
ALL MOTHERS.						
Infants living at end of 3 months.....	1,444	601	548	168	18	19
Number artificially fed.....	416	182	172	46	9	7
Per cent artificially fed.....	28.8	26.3	31.4	27.4	50.0	36.8
Infants living at end of 6 months.....	1,287	661	539	163	17	17
Number artificially fed.....	589	260	245	67	8	9
Per cent artificially fed.....	42.5	39.3	46.3	41.1	47.1	52.8
Infants living at end of 9 months.....	1,338	626	519	163	15	16
Number artificially fed.....	683	300	272	95	7	9
Per cent artificially fed.....	51.0	48.0	52.4	58.3	46.7	56.3
NATIVE MOTHERS.						
Infants living at end of 3 months.....	499	161	234	95	4	4
Number artificially fed.....	162	57	72	27	4	2
Per cent artificially fed.....	32.5	35.4	30.8	28.1	100.0	50.0
Infants living at end of 6 months.....	477	152	223	95	4	3
Number artificially fed.....	226	80	101	39	4	2
Per cent artificially fed.....	47.4	52.6	45.3	41.1	100.0	66.7
Infants living at end of 9 months.....	463	142	221	95	3	2
Number artificially fed.....	255	82	112	57	3	1
Per cent artificially fed.....	55.1	57.7	50.7	60.0	100.0	50.0
FOREIGN-BORN MOTHERS.						
Infants living at end of 3 months.....	945	530	314	72	14	15
Number artificially fed.....	254	125	100	19	5	5
Per cent artificially fed.....	26.9	23.6	31.8	26.4	35.7	33.3
Infants living at end of 6 months.....	910	509	306	68	13	14
Number artificially fed.....	363	180	144	28	4	7
Per cent artificially fed.....	39.9	35.4	47.1	41.2	30.8	50.0
Infants living at end of 9 months.....	875	483	298	68	12	14
Number artificially fed.....	428	218	160	38	4	8
Per cent artificially fed.....	48.9	45.1	53.7	55.9	33.3	57.1
French-Canadian mothers.						
Infants living at end of 3 months.....	511	260	204	34	6	7
Number artificially fed.....	199	100	80	11	4	4
Per cent artificially fed.....	38.9	38.5	39.2	32.4	66.7	57.1
Infants living at end of 6 months.....	485	246	196	31	6	6
Number artificially fed.....	276	139	116	14	4	3
Per cent artificially fed.....	56.9	56.5	59.2	45.2	66.7	50.0
Infants living at end of 9 months.....	458	228	188	31	5	6
Number artificially fed.....	314	156	130	21	3	4
Per cent artificially fed.....	68.6	68.4	69.1	67.7	60.0	66.7

¹ Includes 1 father living on his income.

TABLE 43—Continued.

Infants living and artificially fed at specified age and nationality of mother.

Infants living and artificially fed at specified age and nationality of mother.	Total.	Whose fathers earned specified amount.				
		Under \$650.	\$650 to \$1,049.	\$1,050 and over.	No earn- ings. ¹	Not reported.
<i>Polish mothers.</i>						
Infants living at end of 3 months...	147	133	11		1	2
Number artificially fed.....	6	5	1			
Per cent artificially fed.....	4.1	3.8	9.1			
Infants living at end of 6 months...	144	130	11		1	2
Number artificially fed.....	12	9	2			1
Per cent artificially fed.....	8.3	6.9	18.2			50.0
Infants living at end of 9 months...	138	124	11		1	2
Number artificially fed.....	21	17	3			1
Per cent artificially fed.....	15.2	13.7	27.3			50.0
<i>English, Irish, and Scotch mothers.</i>						
Infants living at end of 3 months...	108	41	52	7	2	1
Number artificially fed.....	18	4	13	1		
Per cent artificially fed.....	17.5	9.8	25.0	14.3		
Infants living at end of 6 months...	100	39	52	6	2	1
Number artificially fed.....	25	7	16	2		
Per cent artificially fed.....	25.0	17.9	30.8	23.3		
Infants living at end of 9 months...	100	39	52	6	2	1
Number artificially fed.....	30	12	16	2		
Per cent artificially fed.....	30.0	30.8	30.8	23.3		
<i>Other foreign-born mothers.</i>						
Infants living at end of 3 months...	184	96	47	31	5	5
Number artificially fed.....	31	16	6	7	1	1
Per cent artificially fed.....	16.8	16.7	12.8	22.6	20.0	20.0
Infants living at end of 6 months...	181	94	47	31	4	5
Number artificially fed.....	50	25	10	12		3
Per cent artificially fed.....	27.6	26.6	21.3	38.7		60.0
Infants living at end of 9 months...	179	92	47	31	4	5
Number artificially fed.....	63	33	11	15	1	3
Per cent artificially fed.....	35.2	35.9	23.4	48.4	25.0	60.0

¹ Includes 1 father living on his income.

Effects of feeding modified by income.—A classification of babies both according to type of feeding and according to father's earnings reveals the fact that the economic status of the family modifies the influence of feeding. Poverty nullifies in part the advantages of breast feeding, while an ample income mitigates the disadvantages of artificial feeding. The reason for this may be, as before noted, that poverty usually means low standards and ignorance on the part of the mother, while ample income makes possible the attainment of higher standards, better medical attention, and greater knowledge in the care of the baby.

In the lowest economic class, in which the fathers earn less than \$650, the percentage of breast-fed babies alive at 3 months who failed to survive till the end of the year was 6.7; in the next class the percentage declined to 3.6, while for the highest class, where fathers earned \$1,050 or more, it was only 2.7. The percentages of deaths among artificially fed babies alive at 3 months were 22, 14.5, and 4.3—in the two lower economic classes percentages 3 and 4 times as large as those for breast-fed babies in the same classes. In the highest class the difference between the percentages almost disappears.

An analysis of the distribution of infant deaths occurring among babies who survived 6 months shows the same results. The percentage of deaths among both breast-fed and artificially fed babies decreased with the advance in economic status. In the highest class, in which fathers earned \$1,050 or more, no babies who had survived 6 months died before the end of the year.

TABLE 44.

TABLE 44.		Infants born during selected year and surviving at specified time.									
Type of feeding at specified age.		Total.	Died later in year.		Whose fathers earned specified amount.						
					Under \$650.			\$650 to \$1,049.			
					Total.	Died later in year.		Total.	Died later in year.		
			Num-ber.	Per cent.		Num-ber.	Per cent.		Num-ber.	Per cent.	
Type of feeding:											
At 3 months of age.....		1,444	138	9.6	691	86	12.4	548	40	7.3	
Breast.....		901	44	4.9	434	29	6.7	338	12	3.6	
Mixed.....		125	20	16.0	75	17	22.7	36	3	8.3	
Artificial.....		416	74	17.8	182	40	22.0	172	25	14.5	
Not reported.....		2						2			
At 6 months of age.....		1,387	81	5.8	661	56	8.5	520	21	4.0	
Breast.....		520	11	2.1	237	8	3.4	203	3	1.5	
Mixed.....		276	15	5.4	164	13	7.9	79	2	2.5	
Artificial.....		589	55	9.3	260	35	13.5	245	16	6.5	
Not reported.....		2						2			

Whose fathers earned specified amount—Continued.								
Type of feeding at specified age.		\$1,050 and over.		No earnings. ¹		Not reported.		
		Total.	Died later in year.		Total.	Died later in year.	Total.	Died later in year.
			Number.	Per cent.				
Type of feeding:								
At 13 months of age.....		168	5	3.0	18	4	19	3
Breast.....		112	3	2.7	7		10	
Mixed.....		10			2		2	
Artificial.....		46	2	4.3	9	4	7	3
At 6 months of age.....		163			17	3	17	1
Breast.....		69			5		6	
Mixed.....		27			4		2	
Artificial.....		67			8	3	9	1

¹ Includes 1 father living on his income.

Feeding methods and employment of mother.—Gainful employment of the mother away from home shows a more conspicuous relation to failure to nurse the baby than either nativity or economic status. Among the babies of mothers employed away from home 65.5 per cent were being artificially fed at 3 months of age, as compared with 28.5 per cent artificially fed among the babies of mothers not gainfully employed at that time. Among babies whose mothers

worked at home, however, the percentage of artificial feeding was lower than in either of the above groups—only 18.1. In general this condition was the same both for native and foreign-born mothers. In the native group the percentage of babies weaned at 3 months of age whose mothers were not gainfully employed was 30.2; of those whose mothers worked at home, it was 30.9; but of those whose mothers worked away from home, it was 67.9. Among foreign-born mothers the tendencies according to employment of mother are not identical, but the contrasts are greater. Among babies of foreign-born mothers who worked at home at the time only 15 per cent had been weaned at 3 months; among babies of mothers not employed at all the per cent was 27.4; and among babies of mothers who worked away from home, 64.4. At 6 months 48.3 per cent of the babies of native mothers then employed at home had been weaned, 42.5 per cent in the case of mothers not employed and 83.3 per cent in the case of mothers employed away from home. The proportions for babies of foreign-born mothers weaned at 6 months were 27, 39.1, and 69.6, respectively.

TABLE 45.

TABLE 45. Infants living and artificially fed at specified age and nationality of mother.	Infants born during selected year.				
	Total.	Whose mothers during year following baby's birth—			Did not report time resumed.
		Had no work or began work after time specified.	Began work before time specified and worked—		
			With baby.	Away from baby.	
ALL MOTHERS.					
Infants living at end of 3 months.....	1,444	1,057	288	87	12
Number artificially fed.....	416	301	52	57	6
Per cent artificially fed.....	28.8	28.5	18.1	65.5	50.0
Infants living at end of 6 months.....	1,387	913	299	163	12
Number artificially fed.....	589	399	93	120	7
Per cent artificially fed.....	42.5	40.4	31.1	73.6	58.3
Infants living at end of 9 months.....	1,338	814	297	216	11
Number artificially fed.....	683	420	114	143	6
Per cent artificially fed.....	51.0	51.6	38.4	66.2	54.5
NATIVE MOTHERS.					
Infants living at end of 3 months.....	499	410	55	28	6
Number artificially fed.....	162	124	17	19	2
Per cent artificially fed.....	32.5	30.2	30.9	67.9	33.3
Infants living at end of 6 months.....	477	365	58	48	6
Number artificially fed.....	226	155	28	40	3
Per cent artificially fed.....	47.4	42.5	48.3	83.3	50.0
Infants living at end of 9 months.....	463	342	58	58	5
Number artificially fed.....	255	174	30	49	2
Per cent artificially fed.....	55.1	50.9	51.7	84.5	40.0
FOREIGN-BORN MOTHERS.					
Infants living at end of 3 months.....	945	647	233	59	6
Number artificially fed.....	254	177	35	38	4
Per cent artificially fed.....	26.9	27.4	15.0	64.4	66.7
Infants living at end of 6 months.....	910	548	241	115	6
Number artificially fed.....	363	214	65	80	4
Per cent artificially fed.....	39.9	39.1	27.0	69.6	66.7
Infants living at end of 9 months.....	875	472	239	158	6
Number artificially fed.....	428	246	84	94	4
Per cent artificially fed.....	48.9	52.1	35.1	59.5	66.7

TABLE 45—Continued.

TABLE 45—Continued.		Infants born during selected year.				
Infants living and artificially fed at specified age and nationality of mother.		Total.	Whose mothers during year following baby's birth—			
			Had no work or began work after time specified.	Began work before time specified and worked—		Did not report time resumed.
				With baby.	Away from baby.	
<i>French-Canadian mothers.</i>						
Infants living at end of 3 months	511	385	78	45		
Number artificially fed	199	142	23	32		
Per cent artificially fed	38.9	36.9	29.5	71.1	66.7	
Infants living at end of 6 months	485	323	80	79		
Number artificially fed	276	166	42	66		
Per cent artificially fed	56.9	51.4	52.5	83.5	66.7	
Infants living at end of 9 months	458	293	78	34		
Number artificially fed	314	192	49	71		
Per cent artificially fed	68.6	65.5	62.8	84.5	66.7	
<i>Polish mothers.</i>						
Infants living at end of 3 months	147	74	70	1		
Number artificially fed	6	3	1	1		
Per cent artificially fed	4.1	4.1	1.4	100.0	50.0	
Infants living at end of 6 months	144	66	68	8		
Number artificially fed	12	4	4	3		
Per cent artificially fed	8.3	6.1	5.9	37.5	50.0	
Infants living at end of 9 months	138	29	67	40		
Number artificially fed	21	4	9	7		
Per cent artificially fed	15.2	12.8	13.4	17.5	50.0	
<i>English, Irish, and Scotch mothers.</i>						
Infants living at end of 3 months	103	74	25	3		
Number artificially fed	18	11	5	1		
Per cent artificially fed	17.5	14.9	20.0	33.3	100.0	
Infants living at end of 6 months	100	57	32	10		
Number artificially fed	25	14	5	5		
Per cent artificially fed	25.0	24.6	15.6	50.0	100.0	
Infants living at end of 9 months	100	54	32	12		
Number artificially fed	30	16	7	6		
Per cent artificially fed	30.0	29.6	21.9	46.2	100.0	
<i>Other foreign-born mothers.</i>						
Infants living at end of 3 months	184	114	60	10		
Number artificially fed	31	21	6	4		
Per cent artificially fed	16.8	18.4	10.0	40.0		
Infants living at end of 6 months	181	102	61	18		
Number artificially fed	50	30	14	6		
Per cent artificially fed	27.6	29.4	23.0	33.3		
Infants living at end of 9 months	179	96	62	21		
Number artificially fed	63	34	19	10		
Per cent artificially fed	35.2	35.4	30.6	47.6		

General discussion of feeding methods.—It appears from these facts that in the case of native mothers both gainful employment away from home and low economic status are frequently accompanied by early weaning of the baby. The mothers who worked away from home are on the whole the poorest mothers; hence the very large proportion of their babies weaned by the age of 3 and 6 months—namely, 67.9 and 83.3 per cent. Among foreign-born mothers, however, low economic status, as has been shown, is accompanied by a general tendency to nurse the baby. Mothers who worked away from home, however, were often required to wean their babies, for 64.4 per cent of these babies were weaned at 3 months and 69.6 per cent at 6 months.

The reason for the divergence in the customs of native and foreign-born mothers (other than French-Canadian) as to the feeding of the baby is not apparent. Possibly the other foreign-born mothers in the poorest classes still follow a custom from which the native mothers, who know more of substitutes for mother's milk, have broken away. The latter and the French-Canadian mothers as well are constantly appealed to by advertisements of patent infant foods. Indeed, one mother gave as a reason for ceasing to nurse her baby that she wanted to try the samples of patent infant foods which had been given her.

Of the native mothers those in the highest economic class, contrary to expectation, practiced breast feeding most commonly, and in this same group, because of access to competent medical advice and because of the better education of the mothers generally, they are apt to make more intelligent use of artificial food and their babies are likely to suffer least from artificial feeding. These very circumstances, however, may explain the reason for the greater readiness of these mothers to nurse their babies, for they would be the class to be reached first by the campaigns of public education in favor of breast feeding which have been carried on in recent years.

Substitutes for mother's milk.—Artificially fed babies of the poorer mothers suffer under the extra handicap of the ignorance of such mothers as to the proper feeding of babies. The importance of a pure city milk supply and of infant-welfare stations to this class of babies is obvious. In Manchester the substitutes for mother's milk most frequently resorted to were condensed milk, patent infant foods, and whole milk. Only infrequently did mothers report that they gave their babies modified milk. The cows' milk was usually the same grade as that used for adult consumption.

There are two grades of milk officially recognized by the city department of health, and of these "inspected milk" is the superior and the one suitable for infants. This grade of milk, however, was only provided for by the State board of health in April, 1913, and introduced into Manchester in the same year. About 10 per cent of the entire supply was pasteurized.

MATERNAL HISTORIES.

Data were obtained from the mothers regarding all pregnancies which they had had previous to the birth of the baby during the selected year. This information included the following details: The total number of pregnancies and the result of each—that is, whether a live-born child, a stillborn child, or a miscarriage; the year of birth and sex of each child; the number of live-born children who had died, and the age of each at death. An analysis of these maternal histories serves to supplement the more detailed study of infants born during a single year.

The histories of 1,618 mothers form the basis of the study of the issues of all pregnancies. From 6 of the 1,624 mothers of babies

born during the selected year complete maternal histories could not be secured.

Infant mortality rate, all pregnancies.—These 1,618 mothers had given birth to 6,061 infants, of whom 1,029 had died in infancy and 174 were stillborn. In addition they reported other pregnancies resulting in 295 miscarriages. The infant mortality rate for 5,887 live-born babies was 174.8, a rate somewhat higher than that found for the babies born during the selected year, which was 165.

Births per mother and nativity of mother.	Births and infant deaths, all pregnancies.						
	Total mothers.	Total births.	Live births.			Stillbirths.	
			Total.	Infant deaths.		Number.	Per cent. ¹
				Number.	Infant mortality rate. ¹		
All mothers.....	1,618	6,061	5,887	1,029	174.8	174	2.9
Births:							
1.....	448	448	421	68	161.5	27	6.0
2.....	310	620	601	73	121.5	19	3.1
3.....	225	675	653	106	165.1	22	3.3
4.....	157	628	614	102	166.1	14	2.2
5.....	115	575	563	75	133.2	12	2.1
6.....	89	534	517	99	191.5	17	3.2
7.....	73	511	500	111	222.0	11	2.9
8.....	52	416	406	71	174.9	10	2.4
9.....	36	324	320	43	134.4	4	1.2
10.....	35	350	337	64	189.9	13	3.7
11.....	26	286	276	67	242.8	10	3.5
12.....	20	240	236	51	216.1	4	1.7
13.....	13	169	166	31	186.7	3	1.8
14.....	9	126	126	44	352.0	1	.8
15.....	3	45	45	6	.....	.....	.....
16.....	6	96	89	13	.....	7	.....
18.....	1	18	18	3	.....	.....	.....
Native mothers.....	540	1,479	1,432	208	141.8	47	3.2
Births:							
1.....	194	194	180	15	83.3	14	7.2
2.....	122	244	237	25	105.5	7	2.9
3.....	93	279	270	40	148.1	9	3.2
4.....	40	160	156	23	147.4	4	2.5
5.....	32	160	158	21	132.9	2	1.3
6.....	25	150	143	26	181.8	7	4.7
7.....	14	98	97	20	.....	1	.....
8.....	6	48	48	13	.....	.....	.....
9.....	5	45	45	4	.....	.....	.....
10.....	3	30	30	2	.....	.....	.....
11.....	4	44	43	7	.....	1	.....
13.....	1	13	11	3	.....	2	.....
14.....	1	14	14	4	.....	.....	.....
Foreign-born mothers.....	1,078	4,582	4,455	826	185.4	127	2.8
Births:							
1.....	254	254	241	53	219.9	13	5.1
2.....	188	376	364	48	131.9	12	3.2
3.....	132	396	383	68	177.5	13	3.3
4.....	117	468	458	79	172.5	10	2.1
5.....	83	415	405	54	133.3	10	2.4
6.....	64	384	374	73	195.2	10	2.6
7.....	59	413	403	91	225.8	10	2.4
8.....	46	368	358	58	162.0	10	2.7
9.....	31	279	275	39	141.8	4	1.4
10.....	32	320	307	62	202.0	13	4.1
11.....	22	242	233	60	257.5	9	3.7
12.....	20	240	236	51	216.1	4	1.7
13.....	12	156	155	28	180.6	1	.6
14.....	8	112	111	40	360.4	1	.9
15.....	3	45	45	6	.....	.....	.....
16.....	6	96	89	13	.....	7	.....
18.....	1	18	18	3	.....	.....	.....

¹ Not shown where base is less than 100.

Stillbirths and miscarriages.—The stillbirths reported formed but a small proportion of all births. It is likely, however, that the number of stillbirths and of miscarriages is understated. The registration of stillbirths is less complete than the registration of live births, and it is more difficult to secure from the mother information about both stillbirths and miscarriages than about live-born children.

TABLE 47

Pregnancies ¹ per mother and nativity of mother.	Number of mothers.							
	Total.	Reporting specified number of miscarriages.						
		None.	1	2	3	4	5	6
All mothers.....	1,618	1,425	125	46	15	4	1	2
Pregnancies:								
1.....	433	433						
2.....	301	287	14					
3.....	215	192	19	3	1			
4.....	170	139	23	7	1			
5.....	107	90	11	6				
6.....	103	78	18	7				
7.....	72	56	9	4	2	1		
8.....	50	36	6	7	1			
9.....	45	33	8	3	1			
10.....	32	22	5	2	1	2		
11.....	30	21	4	2	3			
12.....	17	12	2		2	1		
13.....	19	11	3	3	1		1	
14.....	10	7	1		1			1
15.....	8	4	1	1	1			1
16.....	5	3	1	1				
17.....	1	1						
Native mothers.....	540	481	37	17	2	3		
Pregnancies:								
1.....	188	188						
2.....	117	110	7					
3.....	90	79	9	2				
4.....	46	33	8	5				
5.....	28	25	2	1				
6.....	28	19	3	6				
7.....	18	12	4		1	1		
8.....	10	6	2	1	1			
9.....	3	2		1				
10.....	4	3				1		
11.....	5	3	1	1				
12.....	1					1		
14.....	2	1	1					
Foreign-born mothers.....	1,078	944	88	29	13	1	1	2
Pregnancies:								
1.....	245	245						
2.....	184	177	7					
3.....	125	113	10	1	1			
4.....	124	106	15	2	1			
5.....	79	65	9	5				
6.....	75	59	15	1				
7.....	54	44	5	4	1			
8.....	40	30	4	6				
9.....	42	31	8	2	1			
10.....	28	19	5	2	1	1		
11.....	25	18	3	1	3			
12.....	16	12	2		2			
13.....	19	11	3	3	1		1	
14.....	8	6			1			1
15.....	8	4	1	1	1			1
16.....	5	3	1	1				
17.....	1	1						

¹ Including miscarriages.

The information obtained regarding miscarriages and stillbirths is probably the least reliable of any of the data contained in the maternal histories. It presents, however, at least a minimum statement of the extent of loss of infant life from these causes. There were 174 stillbirths reported by 153 mothers and 295 miscarriages reported by 193 of the 1,618 mothers. Six was the largest number of either stillbirths or miscarriages recorded for any mother.

TABLE 48.

Births per mother and nativity of mother.	Number of mothers.					
	Total.	Reporting specified number of stillbirths.				
		None.	1	2	3	6
All mothers.....	1,618	1,466	138	12	2	1
Births:						
1.....	448	421	27			
2.....	310	291	19			
3.....	225	205	18	2		
4.....	157	144	12	1		
5.....	115	104	10	1		
6.....	89	76	10	2	1	
7.....	73	63	9	1		
8.....	52	43	8	1		
9.....	36	32	4			
10.....	35	25	8	1	1	
11.....	26	18	6	2		
12.....	20	16	4			
13.....	13	11	1	1		
14.....	9	8	1			
15.....	3	3				
16.....	6	4	1			1
18.....	1	1				
Native mothers.....	540	497	40	2	1	
Births:						
1.....	194	180	14			
2.....	122	115	7			
3.....	93	84	9			
4.....	40	37	2	1		
5.....	32	30	2			
6.....	25	20	4		1	
7.....	14	13	1			
8.....	6	6				
9.....	5	5				
10.....	3	3				
11.....	4	3	1			
13.....	1			1		
14.....	1	1				
Foreign-born mothers.....	1,078	968	98	10	1	1
Births:						
1.....	254	241	13			
2.....	188	176	12			
3.....	132	121	9	2		
4.....	117	107	10			
5.....	83	74	8	1		
6.....	64	56	6	2		
7.....	59	50	8	1		
8.....	46	37	8	1		
9.....	31	27	4			
10.....	32	22	8	1	1	
11.....	22	15	6	2		
12.....	20	16	4			
13.....	12	11	1			
14.....	8	7	1			
15.....	3	3				
16.....	6	4	1			1
18.....	1	1				

Age at death.—A large proportion of the deaths reported by the mothers among all infants borne by them occurred during the early period of infancy. Of the total number of deaths, 218, or 21.2 per cent, occurred within the first two weeks after birth.

The maternal histories do not furnish the details necessary for an extended analysis of the causes of infant mortality in the whole group of 6,061 babies. The influence exercised by economic status, size of family, and other factors is however indicated to some extent.

TABLE 49.

Live births per mother and nativity of mother.	Number of mothers.							
	Total.	Reporting specified number of infant deaths.						
		None.	1	2	3	4	5	Over 5.
All mothers.....	1,591	955	412	123	68	17	8	8
Live births:								
1.....	442	367	75					
2.....	310	241	60	9				
3.....	219	131	73	12	3			
4.....	156	79	56	15	6			
5.....	115	61	38	13	2		1	
6.....	86	25	38	13	7	2	1	
7.....	72	16	19	22	11	3	1	
8.....	48	13	15	10	9	1		
9.....	42	11	17	8	5			1
10.....	32	7	6	6	8	5		
11.....	23		5	6	6	2	2	2
12.....	17	1	5	5	3	1	1	1
13.....	12	1	2	3	3	1		2
14.....	8		2		1	2	1	2
15.....	4		1	1	2			
16.....	4	2			1		1	
18.....	1				1			
Native mothers.....	526	379	112	22	8	2	3	
Live births:								
1.....	187	171	16					
2.....	125	99	24	2				
3.....	87	55	25	6	1			
4.....	39	21	13	5				
5.....	34	19	10	4			1	
6.....	21	7	11	1	1		1	
7.....	13	3	5	3	1		1	
8.....	6		3		2	1		
9.....	5	2	2	1				
10.....	4	2	2					
11.....	4		1		3			
14.....	1					1		
Foreign-born mothers.....	1,065	576	300	101	60	15	5	8
Live births:								
1.....	255	196	59					
2.....	185	142	36	7				
3.....	132	76	48	6	2			
4.....	117	58	43	10	6			
5.....	81	42	28	9	2			
6.....	65	18	27	12	6	2		
7.....	59	13	14	19	10	3		
8.....	42	13	12	10	7			
9.....	37	9	15	7	5			1
10.....	28	5	4	6	8	5		
11.....	19		4	6	3	2	2	2
12.....	17	1	5	5	3	1	1	1
13.....	12	1	2	3	3	1		2
14.....	7		2		1	1	1	2
15.....	4		1	1	2			
16.....	4	2			1		1	
18.....	1				1			

TABLE 50.

Births per mother and nativity of mother.	Number of mothers.								
	Total.	Reporting specified number of stillbirths and deaths of infants aged 2 weeks or less.							
		None.	1	2	3	4	5	6	10
All mothers.....	1,618	1,316	239	50	8	2	1	1	1
Births:									
1.....	448	404	44	—	—	—	—	—	—
2.....	310	279	29	2	—	—	—	—	—
3.....	225	183	37	3	2	—	—	—	—
4.....	157	125	25	7	—	—	—	—	—
5.....	115	88	23	4	—	—	—	—	—
6.....	89	67	13	7	1	—	1	—	—
7.....	73	50	14	8	1	—	—	—	—
8.....	52	36	11	4	1	—	—	—	—
9.....	36	24	10	2	—	—	—	—	—
10.....	35	20	11	2	1	1	—	—	—
11.....	26	12	6	6	2	—	—	—	—
12.....	20	13	5	1	—	1	—	—	—
13.....	13	7	5	1	—	—	—	—	—
14.....	9	3	3	2	—	—	—	—	1
15.....	3	2	—	1	—	—	—	—	—
16.....	6	2	3	—	—	—	—	1	—
18.....	1	1	—	—	—	—	—	—	—
Native mothers.....	540	463	68	7	1	—	1	—	—
Births:									
1.....	194	175	19	—	—	—	—	—	—
2.....	122	113	9	—	—	—	—	—	—
3.....	93	76	16	1	—	—	—	—	—
4.....	40	33	6	2	—	—	—	—	—
5.....	32	26	6	1	—	—	—	—	—
6.....	25	18	5	1	—	—	1	—	—
7.....	14	10	3	—	1	—	—	—	—
8.....	6	4	2	—	—	—	—	—	—
9.....	5	5	—	—	—	—	—	—	—
10.....	3	2	1	—	—	—	—	—	—
11.....	4	2	1	1	—	—	—	—	—
13.....	1	—	—	1	—	—	—	—	—
14.....	1	1	—	—	—	—	—	—	—
Foreign-born mothers.....	1,078	853	171	43	7	2	—	1	1
Births:									
1.....	254	229	25	—	—	—	—	—	—
2.....	188	166	20	2	—	—	—	—	—
3.....	132	107	21	2	2	—	—	—	—
4.....	117	93	19	5	—	—	—	—	—
5.....	83	63	17	3	—	—	—	—	—
6.....	64	49	8	6	1	—	—	—	—
7.....	50	40	11	8	—	—	—	—	—
8.....	46	32	9	4	1	—	—	—	—
9.....	31	19	10	2	—	—	—	—	—
10.....	32	18	10	2	1	1	—	—	—
11.....	22	10	5	5	2	—	—	—	—
12.....	20	13	5	1	—	1	—	—	—
13.....	12	7	5	—	—	—	—	—	—
14.....	8	2	3	2	—	—	—	—	1
15.....	3	2	—	1	—	—	—	—	—
16.....	6	2	3	—	—	—	—	1	—
18.....	1	1	—	—	—	—	—	—	—

Order of pregnancy and age of mother.—The relative importance of order of pregnancy and age of mother as factors in infant mortality has never been established.

It is interesting to compare the data for all pregnancies shown in the next table with those presented in Tables 19 and 21, which relate to the babies born during the selected year. Infant mortality rates do not show an absolutely regular trend from one pregnancy to the next, or from one age group to the next, any more than when based upon births during the selected year, but by making comparisons of

groups of three the general tendency to a higher infant mortality rate among later-born children is shown.

TABLE 51.

Order of pregnancy and age of mother.	Births and infant deaths, all pregnancies.				
	Total births.	Live births.		Stillbirths.	
		Total.	Infant deaths.		Per cent. ¹
			Number.	Infant mortality rate. ¹	
All pregnancies, all ages.....	6,061	5,887	1,029	174.8	2.9
Under 20.....	422	415	100	241.0	1.7
20 to 24.....	2,031	1,972	366	185.6	2.9
25 to 29.....	1,860	1,816	294	156.4	2.4
30 to 34.....	1,065	1,037	161	155.3	2.6
35 to 39.....	530	510	90	176.5	3.8
40 and over.....	142	130	22	169.2	8.5
Not reported.....	11	7	6	4	.....
First pregnancy, all ages.....	1,631	1,574	274	174.1	3.5
Under 20.....	324	319	71	222.6	1.5
20 to 24.....	877	844	145	171.8	3.8
25 to 29.....	328	315	43	136.5	4.0
30 to 34.....	79	73	11	6	.....
35 to 39.....	20	20	2	.....	.....
40 and over.....	2	2	1	.....	.....
Not reported.....	1	1	1	.....	.....
Second pregnancy, all ages.....	1,178	1,151	189	164.2	2.3
Under 20.....	80	78	23	.....	.....
20 to 24.....	621	609	108	177.3	1.9
25 to 29.....	353	346	44	127.2	2.0
30 to 34.....	102	96	12	6	5.9
35 to 39.....	19	19	2	.....	.....
40 and over.....	2	2	.....	.....	.....
Not reported.....	1	1	.....	.....	.....
Third pregnancy, all ages.....	868	847	149	175.9	2.4
Under 20.....	16	16	6	.....	.....
20 to 24.....	330	320	66	206.3	3.0
25 to 29.....	370	364	55	151.1	1.6
30 to 34.....	114	111	16	144.1	2.6
35 to 39.....	33	32	4	1	.....
40 and over.....	3	3	1	.....	.....
Not reported.....	2	1	1	1	.....
Fourth pregnancy, all ages.....	641	626	122	194.9	2.3
Under 20.....	2	2	.....	.....	.....
20 to 24.....	139	136	32	235.3	2.2
25 to 29.....	320	312	57	182.7	2.5
30 to 34.....	137	136	26	191.2	1.7
35 to 39.....	38	36	4	2	.....
40 and over.....	1	1	.....	.....	.....
Not reported.....	4	3	3	1	.....
Fifth pregnancy, all ages.....	475	465	73	157.0	2.1
20 to 24.....	45	44	10	.....	.....
25 to 29.....	231	230	38	165.2	1.4
30 to 34.....	141	137	18	131.4	2.8
35 to 39.....	49	46	7	3	.....
40 and over.....	8	8	.....	.....	.....
Not reported.....	1	.....	.....	1	.....
Sixth pregnancy, all ages.....	361	352	53	150.6	2.5
20 to 24.....	13	13	3	.....	.....
25 to 29.....	146	142	23	162.0	2.7
30 to 34.....	147	145	20	137.9	1.4
35 to 39.....	48	47	6	1	.....
40 and over.....	6	5	1	1	.....
Not reported.....	1	.....	.....	1	.....

¹ Not shown where base is less than 100.

TABLE 51—Continued.

Order of pregnancy and age of mother.	Births and infant deaths, all pregnancies.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent. ¹
			Number.	Infant mortality rate. ¹		
Seventh pregnancy, all ages.....	269	269	50	193.1	10	3.7
20 to 24.....	5	5	1	.....	.....	.....
25 to 29.....	72	68	15	.....	4	.....
30 to 34.....	121	120	20	166.7	1	.8
35 to 39.....	40	57	13	.....	3	.....
40 and over.....	11	9	1	.....	2	.....
Eighth pregnancy, all ages.....	200	193	25	129.5	7	3.5
20 to 24.....	1	1	1	.....	.....	.....
25 to 29.....	25	24	2	.....	1	.....
30 to 34.....	99	98	13	.....	1	.....
35 to 39.....	61	56	9	.....	5	.....
40 and over.....	14	14	.....	.....	.....	.....
Ninth pregnancy, all ages.....	146	142	29	204.2	4	2.7
25 to 29.....	8	8	3	.....	.....	.....
30 to 34.....	64	63	14	.....	1	.....
35 to 39.....	69	57	10	.....	2	.....
40 and over.....	14	13	1	.....	1	.....
Not reported.....	1	1	1	.....	.....	.....
Tenth pregnancy, all ages.....	103	99	23	.....	4	3.9
25 to 29.....	4	4	2	.....	.....	.....
30 to 34.....	32	31	4	.....	1	.....
35 to 39.....	50	49	14	.....	1	.....
40 and over.....	17	15	3	.....	2	.....
Eleventh pregnancy, all ages.....	76	73	14	.....	4	.....
25 to 29.....	2	2	1	.....	.....	.....
30 to 34.....	15	14	5	.....	2	.....
35 to 39.....	41	40	5	.....	1	.....
40 and over.....	17	16	3	.....	1	.....
Twelfth pregnancy, all ages.....	49	47	11	.....	2	.....
25 to 29.....	1	1	1	.....	.....	.....
30 to 34.....	7	7	.....	.....	.....	.....
35 to 39.....	27	27	5	.....	.....	.....
40 and over.....	14	12	5	.....	2	.....
Thirteenth pregnancy, all ages.....	31	28	10	.....	3	.....
20 to 34.....	4	4	1	.....	.....	.....
35 to 39.....	13	12	7	.....	1	.....
40 and over.....	14	12	2	.....	2	.....
Fourteenth pregnancy, all ages.....	19	18	5	.....	1	.....
20 to 34.....	2	2	1	.....	.....	.....
35 to 39.....	9	9	2	.....	.....	.....
40 and over.....	8	7	2	.....	1	.....
Fifteenth pregnancy, all ages.....	9	9	1	.....	.....	.....
25 to 39.....	2	2	.....	.....	.....	.....
40 and over.....	7	7	1	.....	.....	.....
Sixteenth pregnancy, all ages.....	4	4	1	.....	.....	.....
25 to 39.....	1	1	.....	.....	.....	.....
40 and over.....	3	3	1	.....	.....	.....
Seventeenth pregnancy, all ages.....	1	1	.....	.....	.....	.....
40 and over.....	1	1	.....	.....	.....	.....

¹ Not shown where base is less than 100.

Plural births.—Of the total number of pregnancies 64 resulted in live-born twins and 1 each in stillborn twins and in stillborn triplets. In *Natality and Fecundity*¹ it is stated that the frequency of twins in Scotland in 47 consecutive years from 1855 to 1901 amounted to 11.7 per 1,000 confinements. In Manchester, among the 1,618 mothers reporting the results of 5,994 confinements, the twin pregnancies numbered 10.8 per 1,000.

Exactly half of the 128 live-born twin infants died in infancy. This infant mortality rate of 500 among them, as compared with a rate of 174.8 for all births at all pregnancies and 167.6 for single births at all pregnancies, conforms with the usual findings in foreign countries as regards the high infant mortality among twins.

TABLE 52.

Age of mother.	Plural births resulting from all pregnancies.					
	Total plural births. ¹	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent. ²
			Number.	Infant mortality rate. ²		
All mothers.....	133	128	64	500.0	5	3.8
Under 20.....	10	10	6	.....	.....	.....
20 to 24.....	38	36	17	.....	2	.....
25 to 29.....	36	36	15	.....	.....	.....
30 to 34.....	20	18	10	.....	2	.....
35 to 39.....	21	20	12	.....	1	.....
40 and over.....	6	6	2	.....	.....	.....
Not reported.....	2	2	2	.....	.....	.....

¹ Twins resulted from 65 pregnancies and triplets from 1 pregnancy.

² Not shown where base is less than 100.

Nationality of mother.—A classification of the 6,061 babies by nationality of mother showed a higher infant death rate among babies of foreign-born mothers than among babies of native mothers, and also higher rates for the French-Canadian and Polish than for other foreign groups. This same tendency existed when the comparison was limited to infants born during the selected year to these mothers. The rate was 141.8 for natives and 185.4 for all foreign born. The percentage of stillbirths among foreign-born mothers, however, was only 2.8, a percentage lower than that shown for native mothers, which was 3.2. This outcome may have been due to incomplete data on stillbirths, inasmuch as the proportion of stillbirths reported for all mothers was low. (See Table 53.)

¹ Lewis, C. J. and J. Norman, *Natality and Fecundity*, London, 1906, p. 63.

TABLE 53.

Nationality of mother.	Total mothers.	Births and infant deaths, all pregnancies.					
		Total births.	Live births.			Stillbirths.	
			Total.	Infant deaths.		Number.	Per cent.
				Number.	Infant mortality rate.		
All mothers.....	1,618	6,061	5,887	1,029	174.8	174	2.9
Native mothers.....	840	1,479	1,432	203	141.8	47	1.2
Foreign-born mothers.....	1,078	4,582	4,455	826	185.4	127	2.8
French-Canadian.....	601	2,906	2,815	583	207.1	90	1.1
Polish.....	167	535	517	90	174.1	8	1.5
English, Irish, and Scotch..	111	514	497	63	126.8	17	3.3
Greek and Syrian.....	72	191	187	25	133.7	4	2.1
German.....	30	123	119	18	151.3	4	3.3
Jewish.....	24	114	111	16	144.1	3	2.6
All other and not reported..	73	210	200	31	148.3	1	.5

Economic status.—The economic status of the family for the whole period covered by the maternal history was assumed to be indicated, roughly at least, by the amount the father earned in the year following the birth in the selected year. This assumption without doubt is erroneous in individual cases, but it is believed that for the majority of families the earnings of the father did not change sufficiently from year to year to produce a radical change in the standard of living.

The results show, for all mothers, a decline in the infant mortality rate accompanying the advance in economic status with one exception. The infant mortality rate among babies whose fathers earned under \$550 a year was 184.4, while the rate for babies in the next class, whose fathers earned \$550 to \$649, was somewhat higher—195.3; but this exception does not disturb the trend. In the succeeding classes the infant mortality rate decreased steadily, and the rate in the highest economic class, where fathers earned \$1,250 and over, was only 99.3. It is apparent that the same general relation between economic status and the infant mortality rate is revealed here that was found in the analysis of the rate for the babies born during the selected year. The assumption involved in the determination of economic status for the larger group of babies makes the figures presented for them less reliable than those shown for the babies born during the selected year.

TABLE 54.

Father's earnings and nativity of mother.	Total mothers.	Births and infant deaths, all pregnancies.					
		Total births.	Live births.			Stillbirths.	
			Total.	Infant deaths.		Number.	Per cent. ¹
				Number.	Infant mortality rate. ¹		
All mothers.....	1,618	6,061	5,887	1,029	174.8	174	2.9
Father's earnings:							
Under \$550.....	493	1,916	1,866	344	184.4	50	2.6
\$550 to \$649.....	292	1,108	1,065	208	195.3	43	3.9
\$650 to \$849.....	419	1,618	1,574	288	183.0	44	2.7
\$850 to \$1,049.....	198	668	647	90	139.1	21	3.1
\$1,050 to \$1,249.....	72	268	261	27	103.4	7	2.6
\$1,250 and over.....	103	307	302	30	99.3	5	1.6
No earnings ²	21	87	84	25	.....	3	.....
Not reported.....	20	89	88	17	.....	1	.....
Native mothers.....	540	1,479	1,432	203	141.8	47	3.2
Father's earnings:							
Under \$550.....	87	238	226	36	159.3	12	5.0
\$550 to \$649.....	90	241	232	52	224.1	9	3.7
\$650 to \$849.....	157	475	465	62	133.3	10	2.1
\$850 to \$1,049.....	100	262	254	32	126.0	8	3.1
\$1,050 to \$1,249.....	36	98	93	8	.....	5	.....
\$1,250 and over.....	61	145	143	8	55.9	2	1.4
No earnings ²	5	7	6	2	.....	1	.....
Not reported.....	4	13	13	3	.....	.....	.....
Foreign-born mothers.....	1,078	4,582	4,455	826	185.4	127	2.8
Father's earnings:							
Under \$550.....	406	1,678	1,640	308	187.8	38	2.3
\$550 to \$649.....	202	867	833	156	187.3	34	3.9
\$650 to \$849.....	262	1,143	1,109	226	203.8	34	3.0
\$850 to \$1,049.....	98	406	393	58	147.6	13	3.2
\$1,050 to \$1,249.....	36	170	168	19	113.1	2	1.2
\$1,250 and over.....	42	162	159	22	138.4	3	1.9
No earnings ²	16	80	78	23	.....	2	.....
Not reported.....	16	76	75	14	.....	1	.....

¹ Not shown where base is less than 100.

² Includes 1 father living on his income.

Size of family and infant mortality.—The relation between the infant mortality rate and the size of the family or number of children born, is the point upon which the maternal histories offer the fullest and most reliable data. All pregnancies excepting those resulting in miscarriages were considered. A marked difference in the infant mortality rates was revealed according to the number of such pregnancies, or births. As a rule the rate increased with the number of children to which the mother had given birth, though this tendency was not altogether regular from one number to the next. That is, a rise in the infant mortality rate did not accompany each single increase in the size of the family.

The general underlying tendency toward a higher infant mortality rate in the larger families is revealed when a classification of the number of births per mother is made by groups of three. This, with one exception, is accompanied by a regular increase in the infant mortality rate from the smallest number to the largest. The infant mortality

rate, according to the number of children, then runs as follows: For children of all mothers who have borne 3 children or less the rate is 148.7; for children of mothers who have borne 4 to 6 (inclusive) it is 162.9; 7 to 9 children, 183.5; in families of 10 to 12 children the infant mortality rate is 214.4; and in families of 13 to 15 children it is 241.1. Seven mothers had had more than 15 children. The infant mortality rate for this group presents an exception to the general tendency of the rate to be higher in large families, for there it falls to 149.5. Inasmuch as the numbers involved here are much smaller than for any of the other groups compared this exception is not of great significance.

On the whole, then, although the infant mortality rate shows the variations noted, the general tendency toward a higher infant death rate in the larger families is clearly established.

TABLE 55.		Births per mother.	Number of mothers.	Live births, all pregnancies.	Infant mortality rate.
All mothers.....			1,618	5,887	174.8
Less than 4 births.....			963	1,675	148.7
4 to 6 births.....			361	1,694	162.9
7 to 9 births.....			181	1,228	183.5
10 to 12 births.....			81	849	214.4
13 to 15 births.....			25	336	241.1
16 births and over.....			7	107	149.5

Large families and nationality.—An analysis was made of the size of the family according to nationality. The average number of children born to foreign mothers was 4.3, while among native mothers the average number of children was 2.7. The French-Canadian mothers had the largest families. The average number of children born to these mothers was 4.8. The English, Irish, and Scotch mothers were next in order, with an average of 4.6.

TABLE 56.		Average number of births per mother.		Total mothers.		Mothers reporting specified number of births.									
Nationality of mother.						Under 4.		4 to 6.		7 to 9.		10 to 12.		13 and over.	
						Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
All mothers.....		3.7	1,618	100.0	963	60.8	361	22.3	161	10.0	81	5.0	32	2.0	
Native mothers.....		2.7	540	100.0	409	75.7	97	18.0	25	4.6	7	1.3	2	.4	
Foreign-born mothers....		4.3	1,078	100.0	574	53.2	264	24.5	136	12.6	74	6.9	30	2.8	
French-Canadian.....		4.8	601	100.0	287	47.8	145	24.1	81	13.5	58	9.7	30	5.0	
Polish.....		3.1	167	100.0	104	62.3	48	28.7	13	7.8	2	1.2	.....	.....	
English, Irish, and Scotch.....		4.6	111	100.0	49	44.1	32	28.8	22	19.8	8	7.2	.....	.....	
All other and not reported.....		3.2	199	100.0	134	67.3	39	19.6	20	10.1	6	3.0	.....	.....	

Out of a total of 32 mothers who had had more than 12 children 30 were French Canadians. Mothers of 10 children and over among French Canadians formed 14.6 per cent of the whole number, while among all other foreign-born mothers the percentage who had had this number of children was 3.4. Only 1.7 per cent of the native-born mothers had had as many as 10 children.

General discussion of maternal histories.—In addition to furnishing the basis for the few broad generalizations given above the maternal histories offer a wealth of concrete material. These histories take the family as a unit, but within this small unit may be represented many of the adverse conditions which cause the infant mortality in the community as a whole. The method pursued in the study of infant mortality for the community was to seek for coincidences between a high infant death rate and specific adverse conditions. To portray the conditions found in certain families which suffered a large number of infant deaths is the purpose of this section. These statements do not furnish proof that the conditions portrayed are responsible for the deaths cited, but they do serve to make more vivid some of the evils accompanying a high infant death rate already pointed out in the statistical analysis.

The stories of the mothers which follow are arranged for convenient reference according to the number of births the mother has had. Since these records are not given as typical a case table is submitted, which shows the exact distribution of stillbirths and infant deaths among all mothers classified by the number of children they have borne and the number of years they have been married. By referring to this table it is possible to determine the extent to which any case cited is representative of the group as a whole. The causes of death assigned to babies other than those born during the selected year and included in the detailed study are based on the statements of the mothers unless otherwise indicated in the text. The cause of death of the last born child, however, is that reported by the physician on the death certificate. Methods of feeding and the exact length of time when the mother ceased work before the birth of a child or resumed it afterwards are reported only for the last baby.

ILLUSTRATIVE CASES.

Schedule 993: The mother, 41 years old, had had 12 children (11 pregnancies) in 22 years. She lost 8; 1 was stillborn at 7 months and the others all died in infancy. Four children, including the last, were living at the time of the agent's visit. The mother worked 2 years before marriage in a cotton mill and 19 years after marriage between pregnancies. She had not worked for wages for the last three years. The father also was a cotton-mill operative. His earnings were \$710 from this source during the year after the last baby's birth, but these were increased \$300 from canvassing during his spare

time. Both parents were literate and were intelligent, hard working, and thrifty. The home would have been good had it not been that smoke and soot from a smokestack near by blew into the back windows and made it difficult to keep the home clean.

Schedule 1287: The mother, 41 years of age, had had 12 children in 22 years, of whom 5 died during their first year from diarrhea. She never had been able to nurse any of her babies but fed them on cows' milk. She was an "old-fashioned" mother who used her own mother's household remedies when her children were sick, and called the doctor only when these failed. She worked in a cotton mill from the age of 14 until she was 20, when her first baby was born. The baby's father is a laborer who earned \$624 the year after the last baby's birth, but the family income was increased \$1,500 by the earnings of older children.

Schedule 120: The mother was 42 years old, twice married, at 18 and at 27 years of age, respectively. In all she had 13 pregnancies, 12 of which occurred in the last 14 years. One, she said, resulted in a miscarriage caused by heavy lifting. Seven children died in infancy; 5, including the last baby, from gastrointestinal troubles. The mother had worked in the cotton mill 3 years before her first and 5 years before her second marriage, but never since. The husband was employed in a cigar factory and reported his earnings at \$546 during the year after the birth of the last baby.

Schedule 206: The mother, 38 years of age, had 13 pregnancies in 20 years. These included 1 pregnancy of twins, which resulted in miscarriage. Among the live-born children had occurred 4 infant deaths and 1 death at 2 years of age. The last baby died in the third month, of cholera infantum. The mother, on the doctor's advice, had resorted in part to artificial feeding with this baby, because her own milk was insufficient. She did all her own housework and resumed it 6 days after the last baby was born. As a girl from 13 to 18 she helped with farm work, but never worked in a factory until after the death of the last baby, when she went into the cotton mill. The father was a cotton-mill employee earning \$481 the year after the last baby was born. The home contained only 5 rooms for 9 people.

Schedule 194: The mother, 41 years old, in 21 years had had 12 pregnancies, 11 live-born children and 1 miscarriage. Four children died in infancy, the last of whooping cough and convulsions at 11 months. The mother had no breast milk for this baby, and after the second month she left it in the care of the baby's older sister, aged 17, while she went out to work by the day. Before marriage and up to the time of the birth of her first baby she had worked in a woolen mill. Since that time she had not been gainfully employed until the last year, when she went out by the day at char work. The father's earnings the year after the baby's birth he reported to be approximately \$414.

Schedule 84: The mother, 35 years of age, married at 16 and had 11 children in 19 years. She lost 7 of these under 1 year of age. For the last 2 years she kept lodgers in addition to her millwork, and

did not cease work at all prior to the birth of the last baby, which was born prematurely and died the first day. She resumed her household tasks 3 days after its birth and her millwork in 2 weeks. The mother attributed the loss of the last child to hard work and worry. Her husband had deserted her several times, and she had been the chief support of the family. He contributed nothing to the family's support the year after the birth of the last baby. She had worked in the cotton mill for the last 8 years, with brief intermissions at the birth of each child.

Schedule 183: The mother was 38 years old, married at 18, and bore 11 children in 20 years. Five died in infancy, 3 of digestive troubles. The last baby was artificially fed from birth because of the mother's lack of milk; it died of cholera infantum in the eighth month. The mother had worked in the cotton mill since the age of 12. After marriage she worked intermittently, chiefly during slack seasons in her husband's employment in the shoe factory. She worked until within 6 months of the birth of the last baby and went back to work in the mill 1 month after. The baby was left in the care of its grandmother while the mother was away at work. Home duties were resumed in part 3 days after the baby's birth. The home consisted of 4 rooms for 8 people in a 4-family tenement. Apart from room overcrowding, conditions were not bad.

Schedule 1195: The mother, 41 years of age, was married twice, the first time at 16 years of age and the second at 36. She had 8 children in 15 years by the first marriage and 3 in 5 years by the second. All were live born, 3 died in infancy, and 1 at 14 months. Two died of digestive troubles. The last baby was living at the time of the agent's visit. The mother had never attempted to nurse it, because she had to go to work. It was left in the care of an older sister from its second month. This mother did not work before marriage, but since marriage has been almost continuously employed between confinements. From 16 to 21 years of age she worked as housemaid; after that in a cotton mill; since her second marriage, in addition to millwork she has kept lodgers. She worked in the mill until 1 month before the last baby was born and went back a month later. She began to do her housework and to care for the lodgers 9 days after confinement. The husband was a painter, whose earnings the last year were \$468. He could not read and write.

Schedule 1209: The mother, 37 years of age, had 11 children in 19 years. She was again pregnant at the time of the agent's visit and had to cease nursing her last baby at 5 months of age on this account. Three children had died in infancy, 2 of cholera infantum. The mother began work in a cotton mill at the age of 13 and worked regularly until marriage. After marriage she continued to work in the mill at intervals. During the year previous to the birth of the last baby she had worked 6 months, but none in the year following. She was unable to read and write. The father's earnings were reported to be \$832.

Schedule 1305: The mother was 29 years of age. She married at the age of 14 and had 11 children in 15 years. Of these 2 died

under 1 year, 3 between the ages of 1 and 2, and 1 at 2 years. Four deaths, including that of the last baby when 15 months old, were due to gastrointestinal diseases. The last baby had been artificially fed after 2 months because the mother had no more milk. The mother went to work in a cotton mill at the age of 13 and worked until she was 16, when her first baby was born. Since then she has continued to work intermittently between confinements, generally for about 6 months out of each year. She ceased work 7 months before the birth of the last baby and did not resume millwork during the year after. The husband was a shoe operative, with earnings of \$550 in a year. The home consisted of 4 rooms for 7 people.

Schedule 1306: The mother, 38 years old, had 11 children in 14 years. The first 6 all died, 5 in infancy and 1 at the age of 13 months. The last baby had to be weaned after the second month because the mother was weak and had no milk. She did all her own housework, including washing, and took up these duties 5 days after the birth of the last baby. She never worked for wages, however. The father was an unskilled employee in a cotton mill, whose earnings the year after the birth of the last baby were reported at \$529. Both parents were illiterate.

Schedule 338: The mother, 44 years of age, had 11 pregnancies (twins once) in 21 years. Among these there had been 1 miscarriage, 3 infant deaths, and 1 death at 1 year. The last were twins, born prematurely and dying shortly after their birth. This mother began work in a cotton mill at the age of 12 and worked until 18. The next 2 years she worked as a waitress and then returned to the cotton mill until her marriage at 23. During her 21 years of married life she had gone out to work at charring irregularly. She ceased to work out 6 months before the birth of the last baby and did not resume work until 11 months afterwards. The husband was a carpenter whose earnings the year after the birth of the twins were reported at \$775. The home consisted of 4 rooms for 9 persons in a 12-family tenement.

Schedule 198: The mother, 47 years of age, married at 27 and had 13 pregnancies in 20 years. Three resulted in miscarriages and 1 in stillbirth. The mother thought her milk not nourishing and did not nurse the last baby but fed it on a prepared infant food, which, however, failed to agree with the baby, who died in its fourth month of marasmus. This mother worked in a mill 13 years before marriage, from the age of 12 to 25, but never since. Her husband earned over \$1,250 a year.

Schedule 207: The mother was 37 years of age. Ten children (twins at seventh pregnancy) were born in 18 years, 4 of whom died in infancy, 3 of them of gastrointestinal diseases. The mother was unable to nurse the last baby because she had no milk. She said her children were born weak because of her overwork. She first went to work at the age of 14, in a cotton mill, and worked regularly until marriage at the age of 19. After marriage she worked between confinements. She ceased to work in the mill 3 months before the birth of the last baby and went back to her work when

the baby was 3 months old. The child was left in the care of its grandmother, 75 years old, and died 6 weeks later. The father worked in a cotton mill also, and his earnings during the year following the birth of the last baby were approximately \$424. Both parents were illiterate.

Schedule 226: The mother, aged 37, had 11 pregnancies in 19 years, 1 resulting in a miscarriage and 3 in stillbirths. The last 2 children died in infancy, 1 at 3 weeks and 1 at 15 days, of spina bifida. The mother said she had lost these 2 and had had the miscarriage and stillbirths because of "something wrong with the spine." She worked a year in a cotton mill before marriage and occasionally since, but was not gainfully employed the year preceding or following the birth of the last baby. The father was a cotton-mill employee, earning \$475 the year after the birth of the last baby. Both parents were illiterate.

Schedule 1590: The mother was 33 years old when her last baby was born, and in the 15 years of her married life had borne 10 children. Both of the twins which preceded the last baby had died, 1 at 3 months and 1 at 5 months, and the mother said they were always sickly. The last baby was entirely breast fed for 6 months, but during the remainder of the first year the mother's milk was supplemented by other food. The mother had worked as weaver in a textile mill for a year and a half before marriage. After marriage she continued this work for a year and resumed it for 4 months between the births of her first two children. After leaving the mill before the birth of her second child she kept lodgers for 13 years, but the year before the last baby's birth she ceased all gainful employment. This family of 9 persons lived in their own house of 7 rooms. The mother had done all her own housework up to the day of the last baby's birth, but did not resume all her duties until 1 month afterwards. The father was a retail salesman. His earnings were only \$210, but the family income was increased by the rent from another house which they owned.

Schedule 885: The mother, 38 years of age, had 10 children (9 pregnancies) in 17 years. All were live born. The twins, however, were born prematurely and died in a few minutes. Four other children died at ages ranging from 1 to 6 years. The mother had worked in a cotton mill 6 years before marriage, from the age of 15 to 21, and irregularly afterwards. She worked 8 months of the year preceding the last baby's birth and resumed work 9 months after its birth, leaving the baby in the care of a neighbor. This baby was alive at 1 year of age. The husband was a laborer, earning \$418 the year following the birth of the last child. This income was increased by the mother's earnings.

Schedule 984: The mother, 35 years of age, had 11 pregnancies in 14 years—1 miscarriage and 10 live-born children. One child was born prematurely after a period of 7 months gestation and died when a few days old. Three other children died in their first year, 2 at 6 and 1 at 4 months of age. Six children, including the last baby, were surviving at the time of the agent's visit. The mother went

to work in a cotton mill at the age of 15 and worked there until marriage at the age of 21. Since marriage her only gainful work has been the keeping of lodgers. The father, a shoe operative, reported his earnings as \$713. He was unable to read and write.

Schedule 1486: The mother was 41 years of age. She had 10 children in 17 years; 2 were stillborn and 2 had died in infancy. The mother went to work at the age of 13 in a silk mill. She worked there for 8 years prior to marriage. After marriage she was not gainfully employed until after the birth of the last baby. At this time she worked in a cotton mill from the baby's third to its ninth month, leaving it in the care of its 15-year-old sister. While thus at work she continued nursing the baby, feeding it in the morning, at noon, and at night. The father was a laborer earning \$400 in a year.

Schedule 1663: The mother was 40 years of age and had 11 pregnancies, including 1 miscarriage and 1 stillbirth, in 22 years. Three children died in infancy and 6 were surviving at the time of the agent's visit. The mother had worked in a cotton mill between the ages of 14 and 18. Since marriage she worked out irregularly, at washing and cleaning. She was employed at this work until within a month of the birth of the last baby, but had not engaged in it since. The father was a cotton-mill employee, earning \$582 during the year following the birth of the last baby. The family owned their home, a 6-room cottage, but conditions around it were insanitary. The father had dug a hole in the ground for a cesspool. At the time of the agent's visit this was filled and overflowing a drain into a pool in the garden, about 15 feet from the house. Though there was no sewer connection, the house had city water.

Schedule 161: This mother, 36 years of age, had 10 pregnancies in 15 years. Every one of her children excepting the fourth was born prematurely after a 7 months' period of gestation. The third pregnancy resulted in a miscarriage at 6 months. Three children died in early infancy. The mother suffered from long labors and atony of the uterus. She never was engaged in gainful employment and received assistance with her housework to the extent of having her laundry work done. The husband was a teamster who earned \$702 a year, and this was supplemented by income from property.

Schedule 220: The mother was 49 years of age and had 12 pregnancies in 23 years. These included 3 miscarriages and 9 live-born children. One child died at 3 years of age, and 1, the last, at 11 months. The mother attributed all her miscarriages to her weakness from overwork. The mother weaned the last baby at the end of the first month in order to go to work in the mill. She had worked in the mill 4 years before marriage at 26 years of age, and continued intermittently after marriage, averaging 7 months a year. She ceased her millwork only 2 months before the birth of the last baby and resumed it 1 month after, leaving the baby in the care of a 12-year-old sister. She had partially resumed her household duties 3 days after the baby's birth. The husband worked in a

factory where his earnings the year after the birth of the last child had averaged about \$10 per week. The home, 6 rooms for 8 people in a 4-family rear tenement, was dark and without adequate air.

Schedule 236: The mother was 37 years of age. She had 12 pregnancies in 17 years, 3 of which resulted in miscarriages. Three children died, only 1, however, the last, in infancy. This baby died at 7 months of gastroenteritis. The mother had nursed it 4 months, but ceased then, by the doctor's advice, she said, because the baby was sick. The baby was thereafter fed upon condensed milk. The mother worked in the cotton mill 7 years in all, including the first year after marriage. For the last 2 years she was gainfully employed at home taking care of children while their mothers were away at work. The father was a laborer and earned the year after the birth of the last baby only \$260. This was increased by the earnings of others in the family. Neither parent could read or write. The home consisted of 4 rooms for the 8 members of the family, and during the day the 3 children of neighbors of whom the mother had charge.

Schedule 468: The mother was 34 years old. She married at 15 and in 19 years had 13 pregnancies, including 4 miscarriages. She lost 1 baby at 7 months from cholera infantum. The last baby was living at the time of the agent's visit and had been artificially fed from birth because the mother had no milk. The mother worked irregularly after marriage at cleaning and char work, and also for a few months in a shoe factory. She was not, however, gainfully employed either during the year preceding or the year following the birth of the last baby. The father was a day laborer. His earnings the last year he reported at \$250, supplemented by \$350 from other sources.

Schedule 244: The mother was 37 years of age and had 9 children in 17 years, 2 of whom she lost at 4 years of age. The last baby died of cholera infantum at 5 months. This baby was weaned at the end of 5 weeks because the mother had to go to work. The mother's earnings were the sole support of the family, which was deserted by the father. She had worked until within 1 month of the birth of the last baby and resumed this work 5 weeks after, leaving the baby in care of an aunt. The home was a 4-room apartment for 7 persons in an 8-family rear tenement.

Schedule 35: The mother, aged 35, had 10 pregnancies in 13 years. Two resulted in miscarriages and 1, the last, in a still-birth. Three babies died in infancy, all of cholera infantum. The premature deliveries the mother and doctor both attributed to overwork. The mother worked in a cotton mill until within 3 weeks of the birth of the last baby, and had averaged about 7 months' work a year between confinements. She worked for 8 years previous to her marriage, beginning at the age of 14. The father also worked in the cotton mill, and his earnings the year following the birth of the last baby were \$550. The mother did not work during this period. The home consisted of a poorly ventilated 4-room apartment for 6 people in a 3-family house in the congested section. The mother could read and write, but the father could not.

Schedule 690: The mother was 36 years of age and in 16 years she had 8 pregnancies, all resulting in live births. She lost 4 babies in infancy and 1, the last, died in its thirteenth month of infantile paralysis. Three children were surviving at the time of the agent's visit. The mother did not know the cause of death of her babies—"they just died." She had not been able to nurse the last baby. This mother had worked in a textile mill 6 years, previous to marriage, from the age of 14 to 20, and in a woolen mill at intervals since marriage, aggregating about 55 months. She worked until within 3 months of the birth of the last baby, but not since. The husband was an operative in a textile mill, earning \$470 the year after the last baby's birth. He could not read and write; the mother was literate. The home consisted of 4 rooms in a 5-family tenement in a congested section of the city. The toilet was used in common with other families in the house.

Schedule 867: The mother was 37 years of age. She married at 15 and had 9 pregnancies, 1 of which terminated in a miscarriage, caused, the mother thought, by overwork. Three children died in infancy. Five children, including the last, were living at the time of the agent's visit. This baby had never been nursed, however, because the mother intended to go to work. She had gone out to work for wages since the birth of her last 2 children, 6 years in all. She worked intermittently in a cotton mill during this period, and for the last 2 years had, in addition, kept 1 or 2 lodgers. The year previous to the birth of the last baby she worked in the cotton mill 9 months, until within 2 months of its birth. She returned to work 3 months after, leaving the baby in the care of a sister, aged 13, or of another girl aged 16. The father was a cotton-mill operative, earning about \$500 a year.

Schedule 1059: The mother, 35 years of age, in 13 years had 14 pregnancies, 6 of which resulted in miscarriages. She lost 1 baby at 7 weeks of age, 1 at 16 months, and 1 at 18 months, all of diarrhea. The miscarriages, she said, the doctor attributed to her weakness caused by her work in the mill. Previous to marriage she had been employed as a cotton-mill operative 6 years (from the age of 16) and at intervals since marriage. She had not worked, however, during the year before or following the birth of the last baby. The mother weaned this baby at 4 months because she had again become pregnant, the fifteenth pregnancy. The father's earnings the year following the birth of the last baby were \$540. Neither father nor mother could read and write.

Schedule 1336: The mother, 32 years of age, had married at 16. She had 11 pregnancies, including 3 miscarriages, in 16 years. The miscarriages were attributed by the mother to "weakness," and in one case to a fall. One child died at 6 months, 1 at 1 year of gastrointestinal trouble, 1 at 18 months of convulsions, and 1 as the result of burns; the last baby was living at the time of the agent's visit. The mother had done general housework for 2 years, from the age of 14 to 16. After marriage at 16 she started to work in a cotton mill, where she had worked at intervals ever since. She ceased work only

2 months prior to the birth of the last baby, but did not work during the year following. The husband was a cotton-mill employee whose earnings the year after the baby's birth were \$900.

Schedule 1088: The mother, aged 26, married at 16 and had 8 pregnancies in 10 years. All her children were live born, but she had lost 3 in infancy and 1 at 5 years. Two died at 3 months of cholera infantum, and the other 2 deaths were from pneumonia. Four children, including the last baby, were surviving at the time of the agent's visit. The last child had been artificially fed from birth, because the mother had no milk. This mother had worked in a textile mill since the age of 11, a period of 5 years previous to marriage, and irregularly since. She was not engaged in gainful employment, however, either the year preceding or that following the birth of the last baby. The father's earnings for the year after the last baby's birth approximated \$776. The father could read and write, but the mother could not.

• Schedule 1184: The mother was 34 years of age. She had 11 pregnancies in 12 years. Three of these terminated in miscarriages. There were 8 children live born, but 3 died in infancy. The last baby, which was surviving at the time of the agent's visit, was weaned at 2 months because the mother had again become pregnant. This mother worked 6 years, previous to marriage—3 years at domestic service and 3 years as a shoe operative. She had also worked intermittently since marriage, though not during the last 6 years. Her husband was a retail salesman with annual earnings of \$725, which were supplemented by \$120 from other sources.

Schedule 1192: The mother, 36 years of age, had 10 pregnancies in 16 years, 2 of which terminated in miscarriages at 5 months and 2 in stillbirths at 7 months. One child was born prematurely at 8 months and died on the first day; another died at 17 days of diphtheria. Four children, including the last, were surviving at the time of the agent's visit. The last baby, however, had been ill of scrofula since 5 months of age; its eyes had been sore since birth, so that it had to be kept constantly in a dark room. The mother had been compelled to wean this baby when it was 1 week old because she had no strength to nurse it. She resumed part of her household duties in 5 days after the baby's birth and all of them 10 days later. The mother had been gainfully employed as housemaid for 4 years previous to marriage, but had not worked since. The father was a cotton-mill operative and earned \$416, supplemented by \$260 from other sources. The home consisted of 3 rooms in a 4-family tenement in the congested section of the city. This family consisted of 5 people. Twelve people in all used the toilet.

Schedule 1222: The mother, 30 years of age, had been married at 17 and had 9 pregnancies in 13 years. One terminated in a miscarriage at 4 months, and 1 baby, prematurely born at 8 months, died shortly after birth. Another child died at 3 months of whooping cough, and 3 children at 3, 5, and 10 years, respectively, of tuberculosis, of whooping cough, and of pleurisy. The mother had childbed fever at the birth of the last baby and so was not able to nurse

it. This baby and 2 other children were surviving at the time of the agent's visit. This mother had begun work in a cotton mill at the age of 10, where she worked for 9 years, including 2 years after marriage, but she had not subsequently engaged in gainful employment. The annual earnings of the father were reported by the mother to be over \$1,250. The mother was literate, the father illiterate.

Schedule 1547: The mother, aged 36, had 11 pregnancies in 12 years, including 3 miscarriages after 3 months' periods of gestation. The first miscarriage, the mother said, was caused by overexertion; the 2 succeeding miscarriages, the mother reported, were said by the physician to be due to her weakened condition on account of too frequent pregnancies. The mother was careless of her rugged health, and did not spare herself from overexertion. She had not been gainfully employed since marriage, but had worked in a cotton mill from the age of 18 to 24, previous to marriage. The father earned \$1,092 the year following the birth of the last baby. The home consisted of a 7-room 1-family cottage with adequate light and air. It had no sewer connection, and water from the sink was conveyed from the house through an open drain.

Schedule 36: The mother, who was 41 years of age, had 7 pregnancies in 15 years. The first baby died at 2 weeks and the second at 7 years. The last 2 children were stillborn at 7 months because, the physician stated, of the overwork of the mother. The mother had worked in a cotton mill from the age of 16 until marriage and since marriage it had been her practice to work continuously, unless interrupted for childbearing. It was her custom to work until 6 months pregnant and return to work within a few weeks after childbirth. She did not cease her millwork at all previous to the birth of the last baby and resumed work 1 week after. The father, who was a cotton-mill operative, reported his year's earnings at \$562. The mother's earnings were \$360. Neither parent could read or write. The home consisted of 4 rooms for 5 people in a 5-family tenement. The rooms were dark and ventilation poor.

Schedule 213: The mother was 30 years of age, married at 17, and had 7 pregnancies in 13 years. All of her children were born at term, 1 was stillborn, and 1 died within a few minutes after birth, both deaths caused, the mother thought, by overwork during pregnancy. In addition, 2 other children died in infancy, 1 at 8 months of diarrhea, and the other, the last born, at 4½ months of gastroenteritis. This baby had been weaned by the mother when 3 weeks of age, because she wanted to go to work in the mill. She worked until within 2 months of the birth of this child. She resumed her household duties 4 days after the last baby's birth and went back to her millwork 5 weeks after, leaving the baby in the care of its grandmother. This mother had worked in the cotton mill almost continuously since the age of 13. After marriage it had been her custom to cease work 2 months before the birth of each child, and to resume 2 months after the baby's birth. The father, who was employed in the building trades, earned \$630; the mother's earnings increased this to \$1,100 during the year after the baby's birth. The father could not read and write; the mother was literate.

Schedule 339: The mother was 35 years of age and had 8 pregnancies in 13 years, 1 of which terminated in a miscarriage. Of the 7 live-born children 5, including the last born, died under 6 months of age of malnutrition. The last, which died at 5 months, was nursed only for the first 3 weeks, because the doctor told her, the mother said, that her milk was not good. This mother had worked in a cotton mill from the age of 16 to 22 and for a part of the year prior to the baby's birth, ceasing the work 3 months before, but she did not resume work during the year following. The father was a shoe-factory operative. His earnings were \$634 the year following the last baby's birth.

Schedule 1297: This mother, aged 39, had 7 pregnancies in 15 years, all resulting in live-born children. She lost the first 4; 3 died in infancy and 1 at 16 months, all from malnutrition. The mother had not been able to nurse the last baby on account of lack of milk. This mother worked in a cotton mill 6 years, previous to marriage, from the age of 18 to 24, and since marriage had kept a store in connection with the home. She ceased none of her work previous to the birth of the last baby, and resumed all of it 6 days after. The father was a laborer, with annual earnings of \$511, and the mother earned \$350. The home consisted of a 6-room cottage.

Schedule 1524: The mother was 30 years of age, and in 6 years had 7 pregnancies, including 2 which resulted in miscarriages at 2 and 4 months. She twice gave birth to twins, born alive but prematurely. Three of the 4 twins died in infancy. The last baby and 3 other children were surviving at the time of the agent's visit. This mother had worked for a period of 5 years previous to marriage, 2 years as bookkeeper and 3 years as chambermaid. Since marriage she had kept lodgers now and then. The father was a factory operative, whose earnings approximated \$800 the year following the birth of the last baby. The mother stated, however, that her husband drank, and gave her money only occasionally, so that her brother was obliged to help.

Schedule 18: The mother was 28 years of age. She had 8 pregnancies in 9 years and lost every child. Two were miscarriages at 6 months and 3 were stillborn at full time. The mother thought the cause of these losses was her overwork and too frequent pregnancies. The physician stated that the mother had tuberculosis. The other children died in infancy. The last child was stillborn because of an accident of labor. This mother had worked in a cotton mill for a period of 5 years previous to marriage, from the age of 14 to 19, and since marriage she had worked between confinements. She ceased work 4 months before the birth of the last baby and resumed 5 months afterwards. The mother stated that this was her usual custom. The father's earnings in a year were \$1,170 and the mother's \$164. The home consisted of 5 rooms in a 4-family tenement and had adequate means of ventilation and sanitary facilities, but the building was old, built close to the ground, and unhealthful because of its dampness.

Schedule 38: The mother was 35 years of age and had 6 pregnancies in 16 years. She lost 3 children in all, 1 at 4 years of diphtheria, 1 at 2½ years of gastroenteritis, and the last was stillborn. The mother had worked in a cotton mill for 5 years previous to her marriage at 19, and since then she has been almost continuously employed, working during the major portion of all pregnancies. She ceased work 2 months prior to the birth of the last child and resumed it 3 months after. In addition to her millwork she also kept lodgers during the last year. The father also was a cotton-mill operative, and his earnings during the year following the baby's birth were \$300; the mother's were \$288; and they had \$84 from other sources. Neither parent could read and write. The home was in a 4-family tenement and consisted of 6 rooms for the 5 members of the family and 3 lodgers. Light and air and sanitary facilities seemed adequate.

Schedule 651: The mother, 34 years of age, had 7 pregnancies in 19 years, and had lost all her children but the last 2. One pregnancy resulted in a miscarriage at 3 months, 1 in a stillbirth at 7½ months, and 1 child had died when 5 days old. Two other children died after infancy, 1 at 2 years of cholera infantum and 1 at 1 year of congenital debility. The last baby was weaned at 3 months because of the mother's lack of milk. This mother had worked in a cotton mill since the age of 13. Since marriage it had been her custom to continue work between confinements and during the first 5 months of pregnancy. When the last baby was 7 months old she went back to the mill, leaving the baby in charge of a housekeeper, whom she paid \$4 a week. The father was a cotton-mill operative. He reported his earnings at \$403 during the year following the last baby's birth; the mother's were \$290.

Schedule 707: The mother was 24 years of age and had 6 live-born children in 8 years. The first baby was born prematurely at 7 months and died the day of birth; the next 4 all died of digestive trouble at ages ranging from 5 to 8 months. Three of these were born prematurely. The last child, the only one surviving at the time of the agent's visit, never had been nursed, on account of the mother's sore breasts. This mother began work in a cotton mill at the age of 12 years, where she worked 2 years; from 14 to 16 she worked in a hosiery mill, and after marriage, at 16, she returned to the cotton mill, where she has worked intermittently since—about 3 years in all. She had not been gainfully employed, however, since the birth of her last 2 children. The father was a laborer, earning \$624 during the year following the last baby's birth.

Schedule 328: The mother was 23 years of age and in 6 years had 4 pregnancies, resulting in the birth of 4 live-born children. Only the first child, however, was surviving at the time of the agent's visit. The second and third babies died at 7 and at 15 months, respectively, of diarrhea, and the last baby died at 9 months, of broncho-pneumonia. The mother weaned this baby at 3 months in order to go to work in a textile mill. The mother had begun mill-work at the age of 12, and had continued at it regularly until marriage, at 17; since marriage she had worked between confinements.

The father was a laborer, employed at odd jobs. His earnings the year following the last baby's birth were \$350 and these were supplemented by the mother's earnings, \$333.

Schedule 10: The mother was 39 years of age and had 4 pregnancies in 9 years, 2 of which resulted in the premature birth of stillborn children. One child died at 9 months and 1 was surviving at the time of the agent's visit. This mother worked in the cotton mill from the age of 17 till 21 and also during the years preceding and following the birth of the last baby. She ceased work 1 week prior to the birth of this child, which was stillborn at 8 months, and resumed work 3 weeks after. The father also was an employee in the cotton mill, earning \$600, and the mother earned \$521.

Schedule 1600: The mother had 4 children in 7 years, of whom only the last was living. She began to work in a textile mill at 18 years of age, a year before her marriage, and continued this, with brief interruptions when her first 2 children were born, until she was 24 years old. The first baby died at 1 week of age; the second at 6 months, from measles. The third child lived only 5 minutes. When the last child was born the mother had been doing her own housework and helping in her husband's store until 2 days before the baby's birth, and she resumed these duties when the baby was 1 week old. The family lived in 3 rooms in the rear of the store. The mother nursed her baby throughout the first year. After the seventh month she gave him other food also, because, she said, the doctor advised it. Four other families lived in the building and the toilet was used by 27 persons. The family's income from the store was \$780.

Schedule 258: In the 5 years of her married life this mother, aged 28, had borne 4 children. The first child had died of pneumonia at 18 months and the last baby had died of cholera infantum at 8 months and 17 days. The last baby was breast fed until death. The mother had continued her usual home duties, except laundry work, until the birth of the last baby and resumed them all 2 weeks later. Her family and lodgers, 14 persons in all, occupied 5 rooms in a 2-family house. The home was poorly ventilated and dirty. The father was a textile-mill operative and his earnings during the year following the last baby's birth were \$404, to which was added income from lodgers and other sources.

Schedule 306: The mother was 26 years old and had 3 children in the 4 years of her married life. Only the second child was living. She had worked in a textile mill since she was 19 years old, with intermissions when her first 2 children were born. For a year before the last baby's birth she had not been employed, although she went back to the mill when this baby was 6 months old, leaving him with his grandmother during her absence at the mill. This baby was breast fed until the mother went out to work, when she began to supplement her nursing with other food. A month later she weaned the baby entirely. Both this baby and the first child had died of broncho-pneumonia, the first baby at 21 months and the last at 10

months and 18 days. The father was an engineer earning \$780, and the mother earned \$160. The family lived with 7 other persons in 5 rooms in a 3-family house.

Schedule 313: The mother was 21 years of age and in the 4 years of her married life had 3 children. The last one died of gastro-enteritis just before he was 4 months old. For the first month the baby had mother's milk supplemented by other food, but he was completely weaned at the beginning of the second month. The mother had worked in a textile mill since she was 13 years old. Two months before each baby came she had left the mill, and returned when the baby was 2 months old. The mother had done her housework, except the washing, until the birth of the baby and resumed the housework, in part, 6 days later. A girl of 14 was employed to look after the baby during the mother's absence at the mill. The father was a textile operative. He earned \$383 during the year after the last baby's birth, and the mother earned \$150. They lived in a 5-room flat in an 8-family dwelling.

[illegible]

[illegible]

[illegible]

ILLEGITIMACY.

The condition of illegitimacy subjects babies to special handicaps which make their welfare a problem somewhat apart from the general problem of infant welfare. Babies born to unmarried parents constitute always an abnormal class and must be dealt with as such. For this reason the schedules secured for them were not included in the general tabulations, but were reserved for separate consideration. (See Table 1.) A record of 44 illegitimate births in Manchester during the period studied was obtained by the agents. Of these, 35 were registered, but of that number complete schedules were obtained in only 11 instances. There were 21 who could not be found or had moved out of town and 3 whom it seemed unwise to visit. The scope of the investigation was not such as to warrant taking the measures necessary to obtain full information regarding either the total number of illegitimate births or the circumstances surrounding all those which were known. The data obtained are recognized as incomplete but are presented for what interest they may have.

Among the 44 babies of illegitimate birth 14 died in infancy and 7 were stillborn. The births were nearly evenly divided between native and foreign-born mothers.

Records of the State board of charities relating to the infant asylum in Manchester, which receives foundlings and dependent babies, are of interest in this connection.

Thirty-two Manchester infants under 1 year of age were received into the asylum during the period covered by this investigation. Of these, 15 were reported as of legitimate birth, 16 as illegitimate, and one as unknown. Among the babies at the asylum 14 infant deaths occurred—8 illegitimate babies, 5 babies born in wedlock, and 1 child whose parentage was unknown. The county hospital also had records of 12 babies born there during the period in question whose mothers were from Manchester, and of these 9 were illegitimate. These three groups (that is, the 44 illegitimate births discovered by this investigation, the 9 illegitimate births recorded at the county hospital, and the 16 babies of illegitimate birth received by the infant asylum) probably overlap to some extent, so that it is not possible to deduce from these figures any conclusions as to the number of babies of illegitimate birth born during the selected year.

ENVIRONMENT.

Bad housing, congestion, and insanitary conditions in general, such as dirty streets, defective sewerage, and inadequate or impure water supply are generally regarded in studies of infant mortality as being important factors. These conditions were acute in some parts

of Manchester, but were not extensive. In so far as they did exist, however, there is evidence that they had the same association with high infant mortality rates here as elsewhere. In the central portion of the city were some bad housing areas and congested sections and in the tenement houses agents found many dark rooms as well as dark unventilated toilets.

Though the data presented on housing and sanitation are somewhat meager, they nevertheless show that babies do not thrive in poor and crowded quarters, in tenements, and in alley and rear houses. The exact degree of responsibility, however, of any one of these conditions for infant deaths can not be measured by a comparison of rates. The poverty and low standards of living inevitably bound up with bad housing complicate its effects. It is fair to assume, nevertheless, that to bad housing conditions belongs some share at least in the responsibility for the high infant death rates which accompany them.

HOUSING.¹

A consideration of specified housing defects in connection with the infant mortality rates among babies subjected to them revealed a coincidence of bad housing conditions and a high infant mortality rate. The housing data collected in this study relate to the house in which the baby had lived during the greater part of its first year, and, for stillborn infants, that where the mother had lived during the greater part of her pregnancy.

Sanitary condition of baby's home.—Out of a total of 1,624 dwellings of the 1,643 babies scheduled by this investigation, 1,597 had city water and 1,500 had sewer connection for both sink and toilet. The majority of the homes which did not have city water and sewer connection proved to be located on the outskirts of the city where rural conditions prevailed, so that the absence of these facilities did not serve as an index to general bad sanitary and housing conditions.

Data gathered regarding the sanitary condition of the dwelling give further detail to the general picture of housing and sanitary conditions, although they are not presented as factors in the infant mortality rate. Of the 1,624 dwellings, 1,060 were reported good as to means of ventilation, 480 were fair, and 81 poor. The rooms were reported clean in 741 cases, medium in 671, and dirty in 203 cases. There were 1,531 dwellings where the toilet was a water-closet, and for 1,377 of these it was located in the house; 90 dwellings had wet or dry privies. From these statements it appears that the housing and sanitary conditions of a considerable proportion of the homes visited by the agents were fairly good. (See Table 58.)

¹ See further discussion of housing on p. 131 of this report.

TABLE 58.

Sanitary condition of dwelling.	Number of dwellings occupied by—		
	All mothers.	Native mothers.	Foreign-born mothers.
Total dwellings.....	1,624	541	1,083
Means of ventilation:			
Good.....	1,080	425	655
Fair.....	480	103	377
Poor.....	51	13	38
Not reported.....	3		3
Rooms:			
Clean.....	741	291	450
Medium.....	671	195	476
Dirty.....	208	52	156
Not reported.....	9	2	7
Water supply:			
City.....	1,507	520	1,087
Spring.....	8	2	6
Dig well.....	19	19	0
Type of toilet:			
Water-closet.....	1,331	503	1,028
Wet privy.....	17	8	9
Dry privy.....	73	20	53
No toilet.....	2	1	1
Not reported.....	1		1
Location of toilet:			
House.....	1,377	472	905
Porch.....	16	3	13
Yard.....	137	47	90
Cellar.....	72	12	60
No toilet.....	2	1	1
Not reported.....	20	6	14
Sewer connection:			
Sinks directly connected.....	1,540	510	1,030
Sinks not directly connected.....	53	30	23
Not reported.....	1	1	
Toilet directly connected.....	1,360	493	1,067
Toilet not directly connected.....	121	46	75
No toilet and not reported.....	3	2	1

Street and alley frontage.—The homes of 1,510 babies had street frontage and 129 alley frontage. Conditions in and around alley and rear houses were found by the agents to be almost uniformly bad, and the infant mortality rate for babies in such houses was high. Live-born babies in these houses numbered 123, or 7.9 per cent of the whole number. These babies died at a rate of 227.6 per 1,000, while the death rate among babies in homes with a street frontage was only 159.4.

TABLE 59.

Location of dwelling.	Births during selected year and infant deaths.				
	Total births.	Live births.		Stillbirths.	
		Total.	Infant deaths.		Per cent.
			Number.	Infant mortality rate.	
All locations.....	1,643	1,564	258	165.0	4.3
Street.....	1,510	1,437	229	159.4	4.3
Alley or rear.....	129	123	28	227.6	4.7
Not reported.....	4	4	1		

Multiple dwellings.—Two-family and three-family homes which present conditions not greatly different from those of single dwelling houses were very common. They were built usually with but one apartment to a floor, so that each family had light and air on four sides and were found in large numbers in the more open parts of the city. The term tenement house, in the common sense of the word, should apply in Manchester to houses which contained more than one apartment to a floor, though often rows of attached houses of one or more stories were termed tenements, and they presented many features commonly associated with tenement-house conditions. A number of old three-story wooden houses of this type existed in the central portion of the city. The tendency was, however, for houses of four families or more to represent the tenement type and houses of less than four the single-family type.

There were 244 live-born babies whose homes were in single-family houses, 384 in two-family houses, and 435 in three-family houses. Thus over half the babies, 819, had homes in the two-family and three-family houses so common in the city. The dwellings of 283 live-born babies were in four-family to six-family houses, and 186 had homes in houses containing over six families.

Babies whose homes were in multiple dwellings, particularly in buildings which housed a large number of families, had a decidedly higher death rate than those whose homes were in single-family houses. The death rate for babies whose homes were in one-family houses was 86.1; and in houses containing seven or more families, 236.6. The contrasts are sufficient to indicate the disadvantage of a tenement home to babies.

But in this case, as elsewhere, housing conditions reflect economic status, so that the influence of both conditions undoubtedly enters into the rates quoted above.

TABLE 60.

Dwellings per building.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Percent. ¹
			Number.	Infant mortality rate.		
All classes.....	1,648	1,564	258	165.0	79	4.8
Dwellings:						
1.....	254	244	21	86.1	10	3.9
2.....	408	384	59	150.6	19	4.7
3.....	457	435	77	177.0	22	4.8
4 to 6.....	301	283	46	162.5	18	6.0
7 or more.....	195	166	44	234.6	9	4.6
7 to 9.....	98	90	23	.....	8	.....
10 or more.....	97	96	21	.....	1	.....
Not reported.....	33	32	11	.....	1	.....

¹ Not shown where base is less than 100

Room congestion.—Of the live-born babies included in this investigation 42.5 per cent had homes where the number of persons exclusive of the baby averaged under 1 per room; 46 per cent where the average was 1 but under 2; 6.8 per cent where the average was 2 but under 3; and 1 per cent had homes in which the average number of persons per room was from 3 to 5. Overcrowded rooms were found more commonly among the foreign born than among the native, particularly among the Poles, whose custom it is to take large numbers of "boarders."

The infant mortality rate showed a steady increase according to the number of persons per room. It was 123.3 where the average was less than 1; 177.8 where the average was 1 but under 2; and 261.7 where the average was 2 but less than 3.

TABLE 61.

TABLE 61.		Births during selected year.																	
Persons ¹ per dwelling and nativity of mother.		Total.	According to number of rooms in dwelling.																
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17	Not reported.
All mothers.....		1,643	5	17	123	342	509	341	133	72	21	7	2	5	2	3	1	2	58
Persons per dwelling:																			
1.....		1					1												
2.....		244	5	12	38	68	75	28	7	8	1								2
3.....		243		2	26	67	80	34	19	6	3	2	1	1					2
4.....		218			23	55	62	57	8	9	2		1		1				
5.....		225			23	46	75	46	18	12		3				1			1
6.....		182	2	4	37	69	50	12	6					1		1			
7.....		134			3	26	45	31	17	5	5	1				1			1
8.....		121			3	19	49	26	13	7	2			2					
9.....		73	1	2	9	20	17	12	5	4				1					2
10.....		58				8	9	16	15	6	2					1			1
More than 10.....		96				7	24	35	12	8	2	1				1	1	2	
Not reported.....		48			1		1												46
Native mothers.....		548	3	44	113	159	113	44	39	14	2	2	5	1	2	1	2		4
Persons per dwelling:																			
1.....		1					1												
2.....		113	3	16	32	35	15	6	6										
3.....		122		13	30	42	16	9	6	3	1	1	1						
4.....		85		5	22	21	25	4	5	1				1					
5.....		73		7	13	23	15	4	9		1								1
6.....		59		1	11	19	18	4	4					1		1			
7.....		31		1	7	9	4	5	4										
8.....		19			1	7	4	3	1	1				2					
9.....		14			2	1	3	3	1	3				1					
10.....		15				3	3	6	2	1									
More than 10.....		12			1	1	4	1		1						1	1	2	
Not reported.....		4		1															3
Foreign-born mothers.....		1,095	5	14	79	229	350	228	89	33	7	5			1	1			54
Persons per dwelling:																			
2.....		131	5	9	22	36	40	13	1	2	1								2
3.....		121		2	13	37	38	18	10			1							2
4.....		133			18	33	41	32	4	4	1								
5.....		152			16	33	52	31	14	3		2				1			
6.....		123	2	3	26	50	32	8	2										
7.....		103			2	25	38	22	13		1	1							1
8.....		102		3	18	42	22	10	6	1									
9.....		59	1	2	7	19	14	9	4	1									2
10.....		43			8	6	13	9	4	1						1			
More than 10.....		84			6	23	31	11	8	1	1								3
Not reported.....		44				1													43
French-Canadian mothers.....		610	2	10	36	130	226	128	49	14	3	3			1	1			7
Persons per dwelling:																			
2.....		82	2	7	13	23	26	7		2	1								1
3.....		77		2	7	24	24	9	8			1							2
4.....		86			8	21	31	20	3	2	1								
5.....		101			6	22	41	22	7	1		1				1			
6.....		71	1	1	12	35	16	5	1										
7.....		57			1	10	23	15	6		1	1							

¹ Baby born during selected year not included in number.

TABLE 61—Continued.

Persons ¹ per dwelling and nativity of mother.	According to number of rooms in dwelling.																	
	Total.																	Not reported.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17	
French-Canadian mothers—Con.																		
Persons per dwelling—Continued.																		
8.....	53				8	25	10	6	4									1
9.....	28				4	10	7	6										1
10.....	20				5	3	6	3	2				1					1
More than 10.....	33				1	8	16	5	2									1
Not reported.....	2																	2
Other foreign-born mothers.....	485	3	4	43	99	124	100	40	19	4	2							47
Persons per dwelling:																		
2.....	49	3	2	9	13	14	6	1										1
3.....	44			6	13	14	9	2										
4.....	47			10	12	10	12	1	2									
5.....	51			10	11	11	9	7	2	1								
6.....	52	1	2	14	15	16	3	1										
7.....	46			1	15	15	7	7										1
8.....	49			3	10	17	12	4	2	1								
9.....	31	1	2	3	9	7	3	4	1									1
10.....	23			3	3	7	6	2	1									1
More than 10.....	51			5	15	15	6	6	1	1								2
Not reported.....	42					1												41

¹ Baby born during selected year not included in number.

TABLE 62.

Persons ¹ per room and nativity of mother.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent. ²
			Number.	Infant mortality rate. ¹		
All mothers.....	1,643	1,564	258	165.0	79	4.8
Less than 1.....	698	665	82	123.3	33	4.7
1 but less than 2.....	760	720	128	177.8	40	5.3
2 but less than 3.....	110	107	28	261.7	3	2.7
3 but less than 5.....	15	15	2			
Not reported.....	60	57	18		3	
Native mothers.....	548	523	67	128.1	25	4.6
Less than 1.....	332	318	34	106.9	14	4.2
1 but less than 2.....	199	188	27	143.6	11	5.5
2 but less than 3.....	12	12	5			
Not reported.....	5	5	1			
Foreign-born mothers.....	1,095	1,041	191	183.5	54	4.9
Less than 1.....	366	347	48	138.3	19	5.2
1 but less than 2.....	561	532	101	189.8	29	5.2
2 but less than 3.....	98	95	23		3	
3 but less than 5.....	15	15	2			
Not reported.....	55	52	17		3	
French-Canadian mothers.....	610	574	129	224.7	36	5.9
Less than 1.....	236	221	40	181.0	15	6.4
1 but less than 2.....	325	306	73	238.6	19	5.8
2 but less than 3.....	40	39	13		1	
3 but less than 5.....	2	2				
Not reported.....	7	6	3		1	
Other foreign-born mothers.....	485	467	62	132.8	18	3.7
Less than 1.....	130	126	8	63.5	4	3.1
1 but less than 2.....	236	226	28	123.9	10	4.2
2 but less than 3.....	58	56	10		2	
3 but less than 5.....	13	13	2			
Not reported.....	48	46	14		2	

¹ Baby born during selected year not included in number. ² Not shown where base is less than 100.

Rent.—Rent furnishes an index to the status of the baby's home less reliable than any other so far used, for the reason that with it should be considered the size of the family and the number of roomers or others in the family. In Manchester, moreover, a number of joint families were encountered; that is, two family groups, such as parents and married children or married brothers and sisters, who occupied one dwelling jointly, sharing expenses, including rent. To attribute to a family in such an arrangement the actual amount of rent paid would indicate quarters really inferior to those they occupied, while obviously it would not be accurate to credit them with the rent of the entire dwelling. Such objections, however, merely impair but do not destroy the usefulness of rent as an index to housing status. In a city as small as Manchester, where the population is very mobile, rents tend toward an equality for equal accommodations. A comparison of the rentals paid with the infant mortality rates for each group may serve at least to reenforce data already presented as to the general tendency of the infant mortality rate to fall as housing conditions improve.

The rents paid in Manchester are most readily grouped in four classes: Less than \$7.50 per month; \$7.50 to \$12.49; \$12.50 to \$17.49; and \$17.50 and over. There were 175 homes of live-born babies where the rental paid was less than \$7.50, and the infant mortality rate among babies in these homes was 211.4. The largest number of babies, 703, was found in homes where the rent paid was \$7.50 up to \$12.49. The rate for this group was 172.1. There were 300 babies in the next class, where the rentals were from \$12.50 to \$17.49, and the infant mortality rate among them was 156.7. Only 62 babies belonged to homes with a rental of \$17.50 and over, and 6 deaths occurred among them. The parents of 186 babies owned their homes and the infant death rate was only 86 per 1,000.

TABLE 63.

Tenure of home and nativity of mother.	Live births during selected year and infant deaths.		
	Total live births.	Infant deaths.	
		Number.	Infant mortality rate. ¹
All mothers.....	1,564	258	165.0
Home owned.....	186	16	86.0
Home not owned.....	1,314	226	172.0
Monthly rental:			
Under \$7.50.....	175	37	211.4
\$7.50 to \$12.49.....	703	121	172.1
\$12.50 to \$17.49.....	300	47	156.7
\$17.50 and over.....	62	6	
Free.....	6		
Boarding.....	68	15	
Not reported.....	64	16	
Native mothers.....	523	67	128.1
Home owned.....	68	6	
Home not owned.....	444	58	130.6
Monthly rental:			
Under \$7.50.....	49	11	
\$7.50 to \$12.49.....	217	36	166.9
\$12.50 to \$17.49.....	103	7	68.0
\$17.50 and over.....	43		
Free.....	1		
Boarding.....	31	4	
Not reported.....	11	3	
Foreign-born mothers.....	1,041	191	183.5
Home owned.....	118	10	84.7
Home not owned.....	870	168	193.1
Monthly rental:			
Under \$7.50.....	126	26	206.3
\$7.50 to \$12.49.....	496	85	174.9
\$12.50 to \$17.49.....	197	40	203.0
\$17.50 and over.....	19	6	
Free.....	5		
Boarding.....	37	11	
Not reported.....	53	13	
French-Canadian mothers.....	574	129	224.7
Home owned.....	71	10	
Home not owned.....	494	118	238.9
Monthly rental:			
Under \$7.50.....	71	19	
\$7.50 to \$12.49.....	283	61	211.8
\$12.50 to \$17.49.....	100	24	240.0
\$17.50 and over.....	11	6	
Free.....	4		
Boarding.....	20	8	
Not reported.....	9	1	
Other foreign-born mothers.....	467	62	132.8
Home owned.....	47		
Home not owned.....	376	50	133.0
Monthly rental:			
Under \$7.50.....	55	7	
\$7.50 to \$12.49.....	198	24	121.2
\$12.50 to \$17.49.....	97	16	
\$17.50 and over.....	8		
Free.....	1		
Boarding.....	17	3	
Not reported.....	44	12	

¹ Not shown where base is less than 100.

WARDS.

A comparison of infant mortality rates by neighborhoods is another method of measuring the influence of bad environment. This method, however, yielded more or less negative results in Manchester, for the reason that no practicable method was found of comparing good and bad districts.

Births and deaths were recorded by wards, but the ward divisions in Manchester had only political significance; they did not correspond to any division of the city into sections according to the character of the housing, sanitation, or population. The majority of the wards radiated from the center of the city and presented every variety of neighborhood within their boundaries. Such a lack of distinctive character in the wards made it difficult to interpret the infant mortality rate each showed.

The two wards exhibiting the lowest infant mortality rates, wards 5 and 6, with rates of 120.6 and 119.6, respectively, were the wards containing the greatest proportion of people living under rural and semirural conditions. No crowded or congested areas were found within the boundaries of either.

The highest infant death rates were found in wards 2 and 9. In the former there were 51 infant deaths, which made a rate of 236.1, and in the latter ward 48 deaths, a rate of 227.5. Both of these wards had sections varying widely in character, but they also presented conditions which throw some light upon the large numbers of infant deaths occurring in them. Ward 2 was one of the radiating wards and at its inner end exhibited some of the worst living conditions in the city. Over two-thirds of the mothers here were foreign born, the majority being French Canadians and Poles. Ward 9 was on the west side and quite closely built up, with some congested districts. The housing on the whole, however, was much superior to the worst sections in the congested central portion east of Elm Street. A large proportion of the inhabitants of this ward were "mill" people and over two-thirds French Canadians.

The other wards of the city had infant mortality rates which were well within these extremes and which bore no particular relation to neighborhood conditions. A somewhat peculiar contrast appears between the rates revealed for ward 1 and for ward 4. The former, which contained the best residence district of the city, had an infant mortality rate of 177.6, while the latter, which was the most congested ward in the city, had a rate of only 144.7. Such results may be wholly accidental, of course, since the numbers involved are not large, or they may be explicable upon the basis of facts not disclosed by this investigation. In any case, no satisfactory comparison of neighborhoods and rates can be made on the basis of ward divisions, because of the varied conditions found within each ward.

TABLE 64.

Ward of residence.	Births during selected year and infant deaths.					
	Total births.	Live births.			Stillbirths.	
		Total.	Infant deaths.		Number.	Per cent.
			Number.	Infant mortality rate.		
The city.....	1,643	1,564	258	165.0	79	4.8
Ward:						
1.....	111	107	19	177.6	4	3.6
2.....	224	216	51	236.1	8	3.6
3.....	189	179	27	150.8	10	5.3
4.....	244	235	34	144.7	9	3.7
5.....	143	141	17	120.6	2	1.4
6.....	201	184	22	119.6	17	8.5
7.....	150	141	21	148.9	9	6.0
8.....	157	150	19	126.7	7	4.5
9.....	224	211	48	227.5	13	5.8

TABLE 65.

Nationality of mother.	Births during selected year.									
	Total.	Ward of residence.								
		1	2	3	4	5	6	7	8	9
All mothers.....	1,643	111	224	189	244	143	201	150	157	224
Native.....	548	56	68	56	41	78	82	65	47	55
Foreign born.....	1,095	55	156	133	203	65	119	85	110	169
Canadian, French.....	610	37	70	36	62	31	86	42	96	150
Canadian, except French.....	27	4	.....	4	8	3	6	2	.....	5
Polish.....	170	1	68	62	24	2	10	.....	.....	3
English, Irish, and Scotch.....	115	7	6	13	28	17	10	23	4	8
Greek and Syrian.....	72	.....	.....	.....	65	3	4	.....	.....	.....
German.....	30	.....	.....	.....	.....	.....	2	16	9	3
Jewish.....	24	.....	3	3	12	6	.....	.....	.....	.....
Ruthenian and Lithuanian.....	22	.....	4	14	4	.....	.....	.....	.....	.....
All other and not reported.....	25	6	6	1	5	3	1	2	1	.....

CONCLUSIONS.

Infant mortality rate.—The infant mortality rate of 165 for the whole group of 1,564 live-born infants is strikingly high. Not only is it higher than the rate of 124, computed in 1910 for the general registration area of the United States, and higher than that of 101.8 in 1913 for New York City with all its congestion and large foreign element, but it is also several times as high as the rates found in certain foreign countries.

Environment.—Bad housing and insanitary environment, in so far as they existed, were accompanied by high infant mortality rates. These conditions were confined to relatively few areas and were not generally prevalent throughout the city. They are, however, likely to become worse and more extensive in the future unless controlled by adequate restriction.

Low earnings.—Low earnings of the father indicate in general a low economic status for the family, and in Manchester they were accompanied by a high infant mortality rate. As the father's earnings increased the rate declined substantially.

Mother's employment.—Gainful employment of the mother existed principally when the earnings of the father were low. Such employment away from home usually necessitated artificial feeding and was accompanied by an infant mortality rate higher than that accompanying low earnings of father.

Nationality.—Babies of foreign-born mothers had a higher rate than those of native mothers, largely on account of the numerous deaths among babies of French-Canadian mothers. The French Canadians as a group, however, occupied a generally higher economic status than other foreign born, and gainful employment of the mother was found to a less extent among them. Their high death rate may be accounted for in part by their large families and the prevalence of artificial feeding.

Large families.—In general the later-born children have a greater tendency to a high infant mortality rate than those earlier born. Large families were found chiefly among the French Canadians and among the lower economic groups of other nationalities. The mortality rate among all babies ninth and later in order of birth is considerably higher than the rates for those earlier born in either of these groups with unfavorable rates.

Artificial feeding.—Artificial feeding was accompanied by a higher infant mortality rate than breast feeding. Feeding methods reflect standards and customs and the opportunity of the mother to care for the baby. Artificial feeding was practiced most extensively by mothers gainfully employed away from home; by native mothers in the lowest economic class; and by the French Canadians. In each of these groups other conditions coincident to a high infant mortality rate are also present. In the highest economic group, where the food is more likely to be prepared in accordance with instructions of physicians and where other unfavorable conditions tending to produce a high rate are absent, the rates for breast-fed and artificially fed babies are both low, with a slight difference in favor of the breast-fed baby.

PART II. CIVIC ACTIVITIES AND CONDITIONS.

ORGANIZATION OF INFANT-WELFARE WORK.

During the period covered by this study organized infant-welfare work in Manchester was in charge of private philanthropy. One organization, the Infant Aid Association, gave its exclusive attention to this work. Its activities were confined to the support during July and August of milk stations, where pure milk was distributed at cost or less to mothers otherwise unable to provide it for their babies. The milk was modified according to the baby's requirements and the mothers were given instruction in the care and feeding of the baby. The association began its work in 1912 with the opening of one milk station. In 1914 the number of milk stations was increased to three, with a staff of four nurses giving full time and a number of physicians giving part time. A total of 266 babies were cared for during the two months. In addition to the instruction of mothers at the stations through mothers' meetings and baby clinics, the mothers and babies were visited in their homes.

The District Nursing Association also has interested itself in infant welfare, referring cases to the Infant Aid Association during the months when the milk stations were open and taking over such cases as needed attention after the milk stations had closed. In 1914 they maintained a special baby nurse who devoted all her time to work with babies. There were in her charge during the year 198 babies. The association also gave mothers who were pregnant advice and attention when needed.

The larger of the two textile-manufacturing establishments maintained visiting nurses for the benefit of the families of its employees. As part of their work during 1914 these nurses made visits to infants and attended maternity cases.

The city did not engage directly in infant-welfare work in any form, but in 1913 it appropriated the sum of \$300 toward the work of the District Nursing Association, and it also made similar appropriations to various institutions for the care of dependent infants and children. The department of health had charge of milk inspection and medical inspection of school children; it did not, however, at that time engage in any activities, educational or otherwise, which had as their special object the promotion of infant health and hygiene.

Since this study was made the infant-welfare activities of Manchester have been considerably broadened; the Infant Aid Associa-

tion maintains a milk station all the year; the District Nursing Association is devoting an increased amount of time toward improving infant health and hygiene and maintains a successful baby clinic; the manufacturing establishment mentioned above has increased its infant-welfare work both directly and through contributions; and the department of health now has an infant-welfare nurse giving full time to such work.

BIRTH REGISTRATION.

The registration of births is made compulsory by the State law under penalty of fine.¹ The physician, accoucheur, midwife, or other attendant at birth must report to the town clerk within six days after the birth of the child the facts² required by this law. Stillbirths must be registered both as births and as deaths. A fee of 25 cents is provided for the person reporting and a fee of 15 cents to the town clerk for each birth recorded; also a fee of 25 cents to the town clerk for obtaining the facts regarding a birth not reported.

In spite, however, of the penalty attached to failure to obey the law and the fees provided for compliance, Manchester, in common with many other communities within the registration area, has not secured strict enforcement of the law. Violations are prosecuted when discovered, but the city employs no special methods to discover unregistered births other than checking birth and death certificates against each other. No canvass is made for births. Since a burial permit is required from the board of health before interment can take place, the record of infant deaths is more nearly complete than that of births.

The importance of adequate birth registration as a basis for all other infant-welfare work is now coming to be generally recognized. Unless the number and local distribution of births relative to the number and distribution of infant deaths in a community be known it is not possible to organize intelligently plans for the reduction of infant deaths or for the promotion of infant welfare.

PHILANTHROPIC INSTITUTIONS AND AGENCIES.

Manchester had a considerable number of philanthropic institutions. These were chiefly under private control, and a number had religious affiliations. Residents had access to six hospitals. One of these was a county hospital located a short distance beyond the city limits, one an isolation hospital maintained by the city, and the other four were private institutions. Three of the latter received a

¹ Chapter 173, Public Statutes, 1901, amended by chapter 60 of the Acts of 1911 and by chapter 29 of the Acts of 1913.

² The date and place of birth, name, color, and sex of child, whether living or stillborn, and the name, color, occupation, residence, and birthplace of parents.

small annual appropriation from the city. These hospitals all did general work and accepted obstetrical cases. It was not a common practice, however, among the mothers interviewed to go to the hospital for confinement.

Private relief.—Homes for the care of various classes of dependent children and for the aged and infirm were the most numerous of all philanthropic institutions. Altogether there were 20 such homes in Manchester, of which 8 were for children, 5 for the aged, and the 7 remaining for a variety of classes. The children's homes are of most interest in connection with this report. One of these was an infant asylum, which took only children under 4 years of age, and in one other small children and babies were taken care of by the day while the mothers went to work. All were private institutions, but, inasmuch as there was no county or city children's home, children who were public charges were boarded in these homes by the county and city. Parents also sometimes placed their children in them and paid either wholly or in part the cost of their maintenance. The city contributed a small annual appropriation toward the support of the majority of these homes, and the remainder of their support came from private charity.

The New Hampshire Children's Aid and Protective Society, with headquarters at Manchester, was interested in the protection of children, including infants, from abuse and neglect. A part of its work had been the investigation of infant boarding houses, or private homes which took one or more infants to board, in order to discover and abolish unlicensed places and places unfit to receive babies.

Private charitable relief in Manchester was left largely to unorganized effort. One society maintained by the various Protestant churches was engaged primarily in giving general material relief to the poor in their homes. Other societies and institutions gave some material relief incidentally in connection with other lines of philanthropic activity.

The larger factories did a considerable amount of welfare work for the promotion of the health and general well-being of their employees. This work provided for educational and recreational facilities, medical attention both for employees and for members of their families, assistance in building homes, and other activities.

Public relief.—Public relief of the poor in Manchester was administered by both the city and the county. The city helped residents, that is, persons who had established a settlement; and the county, nonresidents. The requirements for obtaining a settlement were so difficult to meet, however, that the amount of relief given by the county to inhabitants of Manchester exceeded that given by the city. In 1913 the county aided Manchester families representing 1,341 persons, and disbursed \$14,329.84 for the relief of persons in their

homes. This was exclusive of \$2,176.15 spent for the care of indigent soldiers. In addition the county also spent a considerable sum on indoor relief, for the maintenance of Manchester paupers and prisoners at the county farm, and for the board of dependent children outside, estimated to be \$38,103.05.¹ The amounts disbursed by the city were \$14,825.08 on outdoor relief, \$2,706.04 for the support of dependents in homes, and \$391.25 for the relief of indigent soldiers.

In addition, as stated previously, the city contributed toward the support of various private philanthropic institutions. In 1913 this municipal appropriation amounted to \$5,100, divided among 17 organizations.

The total amount, then, expended by county and city for indoor and outdoor relief in 1913 was \$69,964.01. This was exclusive of aid to soldiers and appropriations to private institutions. With these included the amount was \$77,631.41.

This represents a considerable sum spent for public charitable relief in a city of 74,000 population, but in the absence of definite information concerning the total number of persons and of families helped, and the amounts expended for similar purposes by private charity, it is not possible to draw conclusions with regard to the extent of poverty in the city which this expenditure may indicate.

There were 32 babies included in this investigation whose families were on the county or city records as receiving public aid. On account of the difficulty of identifying names, however, this is likely an understatement of the total number.

Public care and protection of infants.—As has already been stated, there were no public institutions for the care of infants or children in Manchester. Dependent children under 3 were cared for at the county almshouse. The published records of the county commissioners showed that 30 babies under 1 year of age were cared for at the county farm in 1913.² The private infant asylum referred to above also admitted 20 babies under 1 year of age during the period covered by this investigation.

Private individuals also took infants to board, but the State law requires that when the number received is two or more it is necessary to obtain from the State board of charities a license to maintain a boarding house for infants.³ The application must first be approved by the local board of health, but supervision thereafter is by the State board of charities. In Manchester during the period covered by this investigation there were two licensed infant boarding houses.

¹ Estimate based on the percentage which the cost of county outdoor relief in Manchester formed of the total county outdoor relief.

² Report of the County Commissioners of Hillsborough County, 1913, pp. 123-126.

³ Session Laws of 1911, ch. 134, p. 150.

EDUCATION.

The educational situation in Manchester reflected to some extent the tendency pointed out in earlier pages for the French Canadians and also the Greeks to retain their own community life. The schools were almost equally divided between public and parochial, 27 of the former and 24 of the latter having enrollments of 6,679 and 6,688 pupils, respectively. One of the parochial schools was of the Greek Church and the others Roman Catholic. The standards of the Greek school did not meet the public educational requirements, however, and it therefore held its sessions only after regular school hours, and attendance in a public school was required of its pupils. The remaining parochial schools were all officially approved.

A number of these schools were termed, locally, "French schools"—that is, they were conducted partly in the French language. There was also one "Polish school." All these schools conformed to the law in teaching English part time, but it appeared to be regarded as a foreign language by some of the children in the French schools. This explanation was given by some of the native-born "French" mothers for their inability to speak English. Agents frequently found that school children whom they addressed on the street to inquire for direction were unable to understand English. In the predominantly French section the language of the home, the street, and the shop was French.

PUBLIC HEALTH AND SANITATION.

Administration.—The board of health is the city department primarily concerned with the problem of public health and sanitation, but at the time of this study the scope of its work was considerably limited by inadequate financial support. The board had no full-time executive health officer, and the amount allowed for salaries was quite insufficient to secure the expert service which such a board requires. The expenditures for 1913, exclusive of the cost of maintenance of the isolation and smallpox hospitals, amounted to only \$11,282.56. Of this, \$2,911.05 was expended for medical inspection in the schools, leaving only \$8,371.51 to cover the cost of sanitary inspection, milk and food inspection, maintenance of laboratory, control of contagious diseases, and payment of salaries and office expenses. Three members of the board of health gave part time and served at a nominal salary. One of the members was a physician, but no physician or trained bacteriologist giving full time regularly was in the board's employ. All the executive and administrative business was transacted at the board meetings which were held usually once a week, though extra meetings were called if the occasion demanded. In 1913 the number of meetings held was 55. Four sanitary inspectors acted as the agents of the board of health

and carried out its orders. With a force and budget so limited the work of this department was necessarily handicapped.

Recently, however, there has been a radical change in the city's policy toward health and sanitation. Since March, 1916, Manchester has had a full-time health officer who is reorganizing the department according to modern standards.

Other city departments concerned with the maintenance of public sanitation are the board of public works, the board of water commissioners, the department of buildings, and the police department. The board of public works has charge of the paving and cleaning of streets, the construction and maintenance of sewers, and the scavenger service. The water commissioners have charge of the city water-works. The department of buildings administers the building code, which lays down regulations for the construction and repair of buildings. The police department cooperates with the board of health in the abatement of nuisances and in maintaining cleanliness of back alleys and back yards.

Milk supply.—The city consumed daily about 22,000 quarts of milk and 900 quarts of cream, coming from 850 farms.¹ Most of this supply the milk inspector reported to be produced within 20 miles of the city and to be from 12 to 18 hours old when delivered to the consumer. All milk was required to be bottled at the dairy or milk station, and to be retailed only in closed containers. All persons selling milk in the city were required to be licensed and all dealers who purchased from others milk to sell in the city to file with the board of health a list of the names and addresses of all persons or firms from whom they collected their milk. All farms producing milk consumed in Manchester, as well as all city milk plants—that is, depots where milk was shipped and bottled for distribution—were subject to inspection by the board of health.

The work of milk inspection at the time of this inquiry included visiting and scoring the various farms and the city milk plants, the collection and laboratory examination of samples of milk, and the notification and prosecution of violations. Two sanitary inspectors of the board of health gave part time to this work. The chief milk inspector was plumbing inspector also, and in addition inspected and scored barber shops. Obviously this force was too small to do satisfactory work. It was not possible to visit the majority of the farms oftener than once a year, and farms lying at too great a distance could not be visited at all. In 1913-14 inspections were made about 24 miles north, 35 miles east, 12 miles south, and 9 miles west.

As stated above, 850 different farms were reported to be supplying the city with milk. As only 91 licenses were granted in 1913

¹ Private report made to Dairy Division, U. S. Department of Agriculture, by board of health, Manchester, Feb. 4, 1914.

to milkmen, it is evident that the city received the bulk of its milk supply from a large number of small producers scattered through the country who sold to middlemen. Such a supply is the most difficult to safeguard. The number of farms visited and scored in 1913 was 420, not quite half of the total number reported to be sending milk to the city.

The official Dairy Instructors' Association score card was used in the work of inspection and the average score for the 420 farms was 46.38 out of a possible 100 points. Regarding the use and significance of the score card, a bulletin of the United States Department of Agriculture says:¹

The score card is not a set of peremptory orders, but a system of giving credit for good conditions and marking down for bad ones. It does not ask or expect a man to be perfect, but rates him as it finds his equipment and methods. A dairy in the seventies is usually in acceptable condition.

The chief requirements as to the quality of milk which may be sold in Manchester, contained in the State law and in the local milk regulations, state that milk shall contain at least 12 per cent total solids, and no adulterants or preservatives; that it shall not be produced from diseased cows, nor under insanitary conditions, nor contain more than 500,000 bacteria per cubic centimeter; it shall be maintained at a temperature of not more than 55° F., and must be retailed in sealed receptacles.² No standard was required for dairy scores, as the board of health considered that the best results would be accomplished by educating the dairymen and enlisting their voluntary interest in proper methods of production. The scores of the various milkmen were kept on file at the board of health office, and might be consulted by private citizens upon request.

Besides dairy inspection an important supplementary means of controlling the quality of the milk supply, and the only means of enforcing bacteriological standards, is the frequent collection and examination of samples for adulterants and particularly for bacteria. The former director of the United States Hygienic Laboratory, Dr. M. J. Rosenau, has the following to say as to the value of bacteriologic counts:³

The health officer who has the advantage of bacteriologic assistance knows that the milk of dairies containing excessive numbers of bacteria is dirty, old, or warm.

With a bacteriologic count as a guide it is comparatively easy to determine the cause of the trouble and institute proper means to correct it. The enumeration of bacteria in milk is, therefore, one of the cheapest and readiest methods at the disposal of the health officers to determine the general sanitary quality of the market milk supply. The laboratory results serve not only as a guide to direct the efforts of the health officer,

¹ "The score card system of dairy inspection." George M. Whittaker, circular 199, revised, Bureau of Animal Industry, U. S. Department of Agriculture, p. 10.

² Sanitary Milk Rules, issued by board of health of city of Manchester.

³ Milk and its Relation to the Public Health, U. S. Hygienic Laboratory, bulletin 56, pp. 436 and 437.

but confirm the conclusions arrived at from an inspection of the dairies and dairy farms.

One great advantage accruing from the bacteriological control of milk is that it affords an opportunity to exclude the milk of diseased cows. * * *

Fresh milk from cows with diseased udders contains an excessive number of streptococci and pus cells, or an excess of pus cells alone. So far as we know, such milk is dangerous for infant feeding.

The total number of samples of milk and cream examined from the Manchester milk supply in 1913 was 826, an average of not quite two a year for every dairy scored, and less than one a year for every farm reported to be supplying milk and cream to Manchester. These were all examined for formaldehyde, but only a portion were examined for other preservatives, for adulterants, and for bacteria. The work of bacteriologic examination of milk was handicapped by lack of adequate laboratory facilities as well as by an insufficient force. In 1914 no bacterial examinations were made, as a sterilizer was not available. Since that time, however, one has been installed.

The board of health at the time of the inquiry employed no trained bacteriologist. The chief milk inspector held a certificate from the New Hampshire College of Agriculture for the completion of a special six weeks' course of instruction for dairy inspectors. The State law makes this provision with reference to the qualifications of milk inspectors:

No milk inspector shall be paid for his services unless he is a registered chemist or is the holder of a certificate from the superintendent of the dairy department of the New Hampshire College of Agriculture and the Mechanic Arts showing the said holder to be qualified to perform such work.¹

Since 1916 the bacterial analysis of the milk supply has been under the direction of the health officer, a trained bacteriologist.

A method employed by the board of health to discover dirty milk is to strain samples collected through cotton pads. In case the result shows the milk to be dirty, the pad is mounted upon a card which bears upon it the inscription "The dirt upon each of these pads was strained out of a pint of your milk," and this is then mailed to the producer with a warning, and if such warning is not effective his milk is excluded from the city.

The standards for "inspected milk" are somewhat stricter than those given above for the general milk supply.² They lay down specific requirements as to the methods and equipment of the dairies, provide for the examination of the cows twice a year for tuberculosis, and require that the milk shall not contain bacteria in excess of 100,000 per cubic centimeter and must be entirely free from pathogenic germs. These regulations were not promulgated until April 15, 1913, so that Manchester did not have the benefit of them during all

¹ Laws of 1901, New Hampshire, ch. 107, p. 607.

² Laws of 1911, New Hampshire, ch. 108, p. 112; and State Board of Health Regulations.

the period which this investigation covers. The tubercular test was enforced for inspected milk only. About 10 per cent of the whole supply was pasteurized. The health officer estimates that now about 50 per cent is pasteurized.

Two dairies supplied inspected milk to Manchester. They had a total of about 50 or 60 cows, and in 1913 their scores were 77.6 and 83.2, respectively; in 1914 they scored 81 and 86.8, respectively. The city milk plants scored an average of 71.1.

The importance of a pure milk supply to the health and well-being of babies is well recognized. The facts recited in the foregoing description make it apparent that the milk supply in Manchester was not adequately safeguarded during the period covered by this investigation. The force of inspectors was inadequate and generally lacking in scientific training. Inspections of dairies were too infrequent to maintain standards of production, and the average of the scores which were obtained was considerably below the rating which indicates an acceptable condition. The use of the bacteriologic count would have been of greater value if more samples had been examined.

Water supply.—The source of Manchester's water supply is Lake Massebesic, a lake of about 2,500 acres, located to the east of the city and partly within its boundaries. The lake is protected from contamination by city and State regulations as to the use which can be made of its banks. The city owned 82 per cent of the shore. The lake had approximately 40 miles of watershed, about half of which was wooded and half cleared. There was no filtration system or settling basin, but the water was pumped from the lake directly into a reservoir of 15,000,000 gallons capacity, from which it flowed directly into the distributing mains. The local superintendent of the water-works estimated that about 90 per cent of the population of Manchester were consumers of this water. The service was extensive and accessible to all parts of the city except the outlying districts.¹

Streets.—Manchester, because of the large rural area within the city limits, had a very considerable street mileage—203.6. Of this, however, 72.7 miles were outlying country roads. Paved streets, including "back streets" and "lanes," comprised only 8.6 miles. The pavements used were chiefly tar, concrete, and granite blocks. The back streets and lanes are not included in the total street mileage given above, and their length is not given in the city reports. There are in the city, however, a number of these narrow thoroughfares running between two main streets, called lanes or back streets, which, though they had some houses fronting on them, were practically alleys.

¹ The reports of the State board of health for 1911-12 and 1913-14 give an analysis of this water supply. The former report states that about 99 per cent of the population are consumers of the city water. No opinion as to the quality of the water supply is included in the report. Some index to the quality, however, may be afforded by the fact that there were only five cases of typhoid fever reported in Manchester for 1913.

The usual width of street in Manchester is 50 feet. Elm Street, the main business street, which runs the length of the city, is 100 feet wide. A few streets are 30 and 40 feet, while the lanes—with the exception of Martin Lane, which is only 17 feet—are 20 feet, the same width as the alleys. Portions only of the lanes were paved, and most of them had no sidewalks. Sidewalks, however, were found along all the principal streets; their total length was approximately 200 miles.

The streets in Manchester were kept in a fair condition. Most of the paved streets were cleaned regularly. Some of the unpaved streets were macadamized. Where that was not the case the streets were apt to be very dusty, because of the loose, sandy soil. About 72 miles of streets were regularly sprinkled between the months of April and November. Some oiling was done also. The chief criticism which the agents encountered with regard to the condition of the streets referred to the "lanes." Some of these were found dirty and littered with trash. Also, in the more outlying districts, dusty streets caused complaint in dry weather.

Sewerage.—The sewer service in Manchester reaches a large proportion of the population. There was in 1913 a total of 93.5 miles of sewer as compared with 203.6 miles of streets, but the fact that so much of the city is rural territory makes this contrast appear more unfavorable than the situation warrants. All the built-up portion of the city had public sewer service, with the exception of a small section near the mills occupied by "company houses." This portion of the city was built and maintained by the mill corporation and was served in part by private sewers. It contained between six and seven hundred dwellings, all of which have now been connected with the sewer.

For the rest of the city the number of house connections with the sewer on record for 1913 was 7,785. The United States census reports the number of dwellings for Manchester in 1910 to have been 8,694, and the number of house connections recorded for that year was 6,884, or 79.2 per cent of the total number of dwellings. Among the corporation's houses were probably several hundred connections. A city ordinance requires that every house within 100 feet of a public sewer shall be connected.¹

All sewage flows directly into the river, and the factory wastes empty into the factory canals and thence into the river. No method of purification was employed. In spite of the fact that the sewer exits are into the Merrimack River where it flows through the center of the city, no nuisance was observable from this method of sewage disposal, due to the fact, no doubt, that the mills surround the river in the heart of the city and there are no dwelling houses near its banks.

¹ Public Statutes, ch. 108, sec. 8, as amended by Laws of 1907, ch. 106, sec. 1.

Garbage and refuse collection.—Garbage collection in 1913 was by private scavengers, licensed by the board of public works, which was charged with the duty of regulating and providing for this service. Collections were required to be made twice a week, and the garbage must be kept by the householder in a covered receptacle apart from ashes and rubbish. Part of the garbage was collected and sold to farmers; part was collected by the farmers themselves for use in feeding their hogs. No complaint was made by the families visited of the service rendered by this system. In the congested sections the agents encountered some cases where garbage and rubbish created a nuisance in yards and alleys, but for the city as a whole the conditions observed were fair. A regulation prohibiting the placing of receptacles in highways has gone far toward remedying these conditions. The board of health in its annual report for 1913 makes the following statements with reference to the scavenger service:¹

Eighty-nine complaints were made against the scavenger service; in each case the proper parties were notified and relief afforded.

Thirty-two persons were found throwing garbage in the back streets and were warned against the practice.

Private swill collectors have been warned 62 times to be neater in their work.

The disposal of rubbish was less satisfactory than that of garbage. The city collected and hauled the rubbish, including not only ashes but rubbish of all sorts—tin cans, crockery, mattresses, paper, etc.—to various dumps located on vacant ground within the city. There were 17 such dumps in use in 1913, and a total of 13,432½ loads, or 71,585.53 cubic yards, of rubbish were collected and deposited upon them. Among the largest was the so-called Putman Street dump, located in a residence district. This dump was not only unsightly and a nuisance because of the odors arising from it, but had more or less organic material mixed with the rubbish which was deposited here. Furthermore, it was a breeding place for germs, flies, and rats and mice. Such articles as old mattresses deposited upon the dumps may readily carry disease directly. The Putman Street dump, at the time this investigation was being carried on, was frequented by people who picked up rags and junk from it. Children also played there. Other dumps were less objectionable. The board of health reports for 1913 that “the dumps have been inspected 65 times; found insanitary 18 times.”

The city authorities made an effort to keep the dumps in as sanitary a condition as possible by burning the combustible material they contained and by covering them with earth, but such a method of rubbish disposal is necessarily unsatisfactory. Since the period to which this report refers, dumping has been discontinued at the Putman

¹ Annual Report of the Board of Health, Manchester, 1913, p. 31.

Street dump. The city still has failed, however, to provide for an incineration plant in accordance with present-day standards of sanitary engineering, a step long urged by the board of health and the board of public works.

With the growth of population in Manchester and increase in its density the present relatively primitive methods of sewage and garbage disposal are likely to result in a serious menace to public health. That these methods are not more obnoxious at present is due in part to the size of the city, the distribution of the population over a broad area, and the fact that the water of the Merrimack is used by this city only for manufacturing purposes.

Housing.—The mills lining the banks of the Merrimack lie in the heart of the city, and spreading outward from them the population becomes less dense. The river and the mills divide the city into two distinct parts, called locally East and West Manchester. East Manchester is the larger and contains the main business section, with Elm Street, running parallel to the river, as its center. West Manchester also has its business street, Main Street, running parallel to the river and bearing the same relation to the west side that Elm Street does to the east. These two parallel streets bound the mill territory, though the bulk of the mills lie on the east side of the river, and it would be more nearly correct, perhaps, to say that the density of the population decreases as one moves outward from these two streets.

Between Elm Street and the mills, on the east side of the river, lies a section known as the "Corporation." This was built up largely with "company houses," put up many years ago to provide for the employees of the cotton mills in the early days of the city's growth. The majority of these houses were found in two-story brick rows, with small yards and sheds to the rear. Some were built in rows facing each other upon a common yard and had grass plots in front. Others fronted directly upon the street. There were also some three-tenement and four-tenement "blocks."¹ The houses were for the most part substantially built and a number of the streets were lined with shade trees, so that they did not present the barren, dilapidated aspect of many "company rows." Conditions varied somewhat, however. At the time of this investigation there were also a number of old wooden tenements, with yard privies, which presented objectionable conditions. These frame tenements have been removed since and within the past two years eight new five-family brick blocks have been erected within the "Corporation." All yard privies also have been removed from corporation premises. Elsewhere most of the houses encountered were connected with sewers, though in a number of cases the water-closet was in a shed to the rear of the house and the tenants

¹ A tenement building is termed, locally, a "block"; this may apply to one building proper or to a row of attached houses.

complained of its freezing up in winter and getting out of repair. The sewer service, street cleaning, and scavenger service in this district are all provided by the mill corporation. All these houses but two blocks belonged to one company, which also owned what would equal about one city block of houses across the river. In all, this company maintained 629 tenements including 31 boarding houses. The wooden tenements, in reality rows of two-and-a-half-story houses, comprised 11 so-called "blocks" and 60 tenements or dwellings.

The worst housing conditions and the most congested district in the city were found east of Elm Street, in the district extending about 15 city blocks along Elm Street, north and south, and about three blocks east, now chiefly included in the present ward 5. It contained portions of wards 2, 3, and 4, so that it was not possible to obtain the population per acre, but there was a considerable degree of lot crowding within this area, and as most of the buildings, with the exception of those along Elm Street, were wooden, the fire menace was serious. In this district were sixteen 4-story wooden tenements, three of which were rear.¹ This neighborhood contained a number of houses fronting on the so-called "lanes," which in reality were alleys, being only 20 feet wide and presenting alley conditions. There were 40 tenements and 43 houses, chiefly wooden and including rear houses, fronting on these lanes. In a number of cases, besides, the buildings ran through from street to alley, occupying practically the entire lot, and several almost solid city half blocks were found, particularly along Elm Street. Many of the wooden houses were old and in bad repair. Toilets, many of which are now in the tenements, were usually in the basements, one for several families, and often the public also had access. Under such conditions it was almost impossible to maintain them in a fit condition. In some cases the pipes had rusted and were so clogged that it was nearly impossible to flush the closets. In the old and dilapidated houses sanitary conditions generally were bad. Also the danger of fire was great in these places, especially as such houses were heated by stoves and the rooms and public halls frequently lighted by lamps.

Along Elm Street a large proportion of the buildings were brick and on the lower floors were used for the most part for business purposes, and above for tenements. Shops and stores claimed a portion of the other streets also, and a considerable number of public buildings were located in the district. One commendable feature which tended to relieve the general congestion of this section was the existence of four or five open squares or commons.

A small section on the west side of the river, in the ninth ward, now the extreme eastern sections of wards 12 and 13, contained

¹ Data as to numbers of alley houses and tenements obtained from fire insurance map of Manchester, published by Sanborn Map Co.

conditions as bad as described above, but much more limited in extent. This was a triangle containing six city blocks located between the mills and Main Street. At the time of the investigation all but two of the buildings in this area were wooden, and it contained seven 4-story wooden tenements, two of which were rear. There were four rear tenements and one rear house. The blocks were bisected by two small lanes, one of 17 feet and one of 20 feet, on which these rear dwellings were found. The occupants were largely French Canadians. Along Main Street in the central portion of the west side were also some bad housing conditions and instances of lot crowding. Some old dilapidated buildings and tenements were found here and a few rear houses, but conditions were not comparable with those just described for the section just east of Elm Street.

Outside of these three areas only isolated cases of bad housing were found. Most of the houses in Manchester were frame dwellings of two and three stories and with adequate lot area. Wooden tenements and flat buildings were scattered all over the city, but the type which was being erected most frequently in all but the best residence portion of the city was the two-family and three-family house. It was cheaper to build than the attached houses, because the fire regulations required that every party wall, or wall between two apartments, must be of fireproof material, and this added to the cost of construction. The three-family house particularly was being built in large numbers, with one family to a floor. This style of building allows a more intensive use of the lot and when new is attractive and desirable in that it permits each family to have light and air on four sides. This condition holds, however, only so long as the adjoining lots are not built upon, and such houses tend toward lot crowding. They are also dangerous in case of fire, as the interior stairways running straight up from first floor to roof act as chimneys. Another common practice in Manchester was to build two houses upon one lot by placing one house to the rear and side so that a portion of the house had frontage on the street. It might or might not be attached to the one in front. Such houses for the most part had adequate light and air and were not counted as rear houses in this report, but houses so placed soon become objectionable and are likely to be shut in later.

The chief evils in the housing situation in Manchester have to do with maintenance. A new building code, passed in 1911, provides against the multiplication of some of the present evils in the construction of new houses, but there is no provision for the alteration of old houses, other than that buildings hereafter remodeled to an extent exceeding the cost of 50 per cent of the original building cost shall be made to conform to the requirements of the code. It also provides that no more frame buildings shall be erected within the fire limits, or if any building shall be damaged by fire to a greater extent than 50 per cent of its value it must be torn down. The new requirements make

construction more expensive, with the result that the old property pays a higher rate on the investment than new buildings could be made to do. The result is that the tearing down of old buildings is delayed, and, since there are no requirements as to the minor alterations or repairs, the condition in which they are maintained depends upon the interest and disposition of the landlord. In some cases the old wooden property has been left standing on the front of the lot and a new brick tenement has been built on the rear.

While tenement-house inspection was not organized, the board of health inspected for sanitary conditions upon complaint. It might order the premises cleaned or water-closets and cesspools cleaned and repaired, or it might order water-closets installed. As before stated, the law requires that all houses within 100 feet of a public sewer be connected, and that a water-closet for every 15 persons be maintained. The board of health also inspected plumbing fixtures when they were installed, to see that they conformed to the plumbing regulations. In 1913, the board stated in its report, 1,002 tenements, 95 vaults and privies, and 50 cesspools were inspected. It reported 21 tenements cleaned, 492 water-closets cleaned or repaired, 21 cesspools and 35 "filthy hallways and roofs" ordered cleaned, and 15 vaults and privies ordered cleaned or repaired. In addition, inspections were made of yards and alleys, cellars, outbuildings, and barns.

The building code provides that for new houses no room shall be built without windows opening either upon a court, yard, or the street, and that not more than 70 per cent of an inside lot or 90 per cent of a corner lot shall be occupied. Every apartment must have a water-closet with adequate means of ventilation. Also the window and floor area is prescribed for each room. Inner courts must be 12 feet in width and outer courts 8 feet for buildings three stories in height. This width must be increased with the increase in the height of the building over three stories, or may be decreased with each story less than three. But a court whose outer side is on the lot line need measure only 4 feet in width for a building three stories in height. Furthermore, the code does not forbid the erection of rear houses nor further encroachments upon the lot by other buildings, on the back or the front, so that the total percentage of the lot which can be occupied may be considerably in excess of 70.

The housing situation in Manchester may be briefly summarized: The city covers a broad area and a large proportion of the population lives in the open parts of the city. Near the center, however, in the areas verging on the business and mill sections, housing conditions were seriously bad. Lot congestion, dilapidated wooden tenements, rear and alley houses, and dark, insanitary dwellings prevailed. Tenement-house inspection was not systematic but was made upon complaint and was chiefly for nuisances.

Schedule used in investigation.

Ward No. B. C. No. D. C. No.		C. B.—14.		BABY.	
BABY. 1. M. F. 2. L. I. 3. L. B., S. B.; at 1 year: Alive, dead		MOTHER. 27. Nationality.....		Name.....	
4. Date birth.....		28. Age.....		Born at.....	
5. Phy'n, M'w'l.—Name.....		29. Marriage ages.....			
Address.....		30. Sp. Eng.: Yes, no. 31. Rd. and W'r.: Yes, no. 32. Yrs. U. S.....			
6. Death (a) date..... (b) Age..... mos.		33. Pregnancies.....			
(c) Causes.....					
(d) Physician.....					
7. Feeding (mos.)		Mother's age.....		MOTHER.	
1 2 3 4 5 6 7 8 9 10 11 12		Year of—.....		Name.....	
(a) Breast.....		Period.....		Address.....	
(b) Mixed.....		Cause.....			
(c) Artificial.....					
(d) Night feedings.....					
Reasons for change.....		Age at death.....		FATHER.	
8. Milk dealer (a) name.....				Name.....	
(b) Kind: Grocery, dairy, farm, cow shed.....				Address.....	
FATHER. 9. Nationality.....		34. Record of employments.....			
10. Age. 11. Sp. Eng.: Y. N. 12. Rd. & W'r.: Y. N. 13. Yrs. U. S.....					
14. Occ.....					
Ind.....					
Home. 15. Street, alley, 16. Front, rear. 17. Fams. in bldg.....					
18. Persons: (a) Family..... (b) Lodgers..... (c) Others.....					
(d) Total..... 19. Rooms..... 20. Vent nr: (a) Means G. F. P.....					
(b) Results Good, Fair, Poor. 21. Clean, Medium, Dirty.....					
22. Water (a) Source: City, spring, dug well, driven well.....					
(b) In, out..... 23. Toilet (a) Type.....					
(b) House, porch, yard, cellar. (c) Persons using.....					
24. Direct city sewer connection: (a) Sinks: Yes, no.....					
(b) Toilet: Yes, no.....					
Income. 25. Annual earnings (a) Father \$.....					
(b) Mother, \$.. (c) Other income, \$.. (d) Total, \$.....					
MONTHLY RENTAL. 26. Amount, \$..... Own, free.....					



PLATE I.—TENEMENT HOUSES IN THE FOURTH WARD, OUT TOWARD VALLEY STREET. MODERN PLUMBING, TOILET ON EVERY FLOOR, ALL SIDES EXPOSED TO LIGHT AND AIR. TYPE OF TENEMENT HOUSE BECOMING MORE COMMON IN MANCHESTER.



PLATE II.—REAR OF AN OLD HOUSE OCCUPIED BY TWO FAMILIES. BOTH USE SAME TOILET IN CELLAR.



PLATE III.—TWO TOILETS IN BASEMENT SERVE THE FOUR FAMILIES LIVING HERE.



PLATE IV.—HOUSE SHOWN ABOVE AND ANOTHER LARGE TENEMENT HOUSE SEPARATED FROM IT ONLY BY A NARROW PASSAGEWAY.



PLATE V.—FOUR-FAMILY HOUSE, CONTAINING FOUR DARK BEDROOMS.
TOILETS IN YARD.



PLATE VI.—REAR VIEW OF SOME THREE-STORY TENEMENT HOUSES.



PLATE VII.—REAR VIEW OF TENEMENT HOUSES.



PLATE VIII.—REAR AND FRONT VIEWS.